

AX - I - DENT - AX

EMPLOYEES' MAGAZINE

United States Smelting Refining and Mining Company
and Subsidiaries



ADVENTURE



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Alaska—A Permanent Land Of Adventure

The Klondike find brought sharply to the attention of the Federal Government the mineral wealth of Alaska. Almost immediately neglect was replaced by a policy of extreme restriction and conservation. Forests and coal and oil lands were retained in the hands of the Government. The development of the country was retarded. Yet Alaska continued slowly to make progress. In 1906 a delegate from Alaska was permitted to sit in Congress. Six years later a legislature was established. In 1913 the United States began the construction of the now completed railroad from Seward to Fairbanks in the interior. In 1923 the Alaska Agricultural College and School of Mines, the "farthest north" institute of higher learning, opened its doors. In the same year the President of the United States came in person to see what might be done to hasten the sound development of this rich northern country. In 1920 the white persons in Alaska numbered 27,883 of whom 25,586 were males. Alaska displays the disproportion between the sexes which has characterized every former frontier. As the land fills up the disparity between men and women will doubtless be modified. This north country is a land of homes for white men as well as red. But Alaska presents a problem which the American pioneer elsewhere never faced. The home-seeker in the north builds his home in the land of the midnight sun on the edge of the Arctic. Going northward the explorer passes at last the limit of agriculture. So remote is Alaska from great centers of population that many years must pass before the northern farmer can hope to ship abroad any considerable quantity of food stuffs. The immediate future of Alaska depends upon its extractive industries, particularly upon its mines, forests, and fisheries, and upon its growing herds of reindeer. As the years pass it is becoming more and more a playground where men and women seeking release from the artificialities of urban life may come face to face with some of the grandest aspects of nature. During the nineteenth century the American frontier swept westward across the continent until halted by the Pacific. In the twentieth, the pioneer, turning northward, approaches with halting steps the ice-bound Polar Sea. Northern Alaska must always remain a frontier where men stand on the edge of a wilderness so unfriendly that few will be willing to make their homes within it.

—The Pageant of America, Volume II.



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Marblehead—Town of Adventure

By EDGAR M. LEDYARD

Marblehead, in Essex county, Massachusetts, with its present population of 8,643, is a mere village in size but a huge metropolis in history.

Name

Before New Englanders settled in this section a few Naumkeg Indians eked out an existence among the rocks, swamps and forests there. The original settlement was called "Marble Harbour." Salem was established in 1626 by Roger Conant to provide food and winter quarters for fishermen. A descendant of Conant changed the "Mex" money of the Philippine Islands into the "Conant" silver and currency used there today. The small paper money of the Philippines was the model for the recently issued United States paper money. That portion of Salem settlement now known as Marblehead retained the name Marble Harbour until 1633, when its present name was generally agreed upon. Marblehead was incorporated in 1649.

Unique Location

Its location is as remarkable as its his-

tory. Most people who look at the map conclude that Marblehead is on the "Cape." It is not on any cape in fact, but on two small peninsulas connected by a strip of sand and pebbles. The town is only sixteen miles from Boston but it retains its quaint features and some of its old buildings. In the Colonial period it ranked commercially with other cities in the state and surpassed most of them in size. It has the unique distinction of having been a port of entry for another seaport town, for after the passage of the Boston Port Bill in 1774 patriotic citizens of Marblehead placed their wharves and warehouses at the disposition of Boston merchants; more remarkable, Marbleheaders refused to profit by this opportunity to make money.

The site of Marblehead hasn't dispossessed farmers of much arable land since it occupies only four square miles of rocks. There is an old quatrain which combines doggerel and geology:



Homes of the Sea Kings

"Marblehead's a rocky place;
Salem is a sandy;
Beverly's a beany place,
And Lynn it is a dandy."

Its harbor is deep but not safe for a severe storm through its capacious mouth is liable to set adrift every vessel there.

Cat Island and the "Smallpox War"

For those who love picturesque islands and weird sea shores, Cat Island, near Marblehead, has its special charms. In 1773 Cat Island was the scene of one of the most remarkable wars in the history of the United States. Elbridge Gerry, Azor Orne, John Glover and his brother, Jonathan, bought the island and established a hospital there for inoculation against smallpox. Some people view small-



Elbridge Gerry

pox inoculations with distrust today but in 1773 the agitation was so great that the officials of Marblehead soon revoked the permit to carry on vaccination work there. The proprietors continued their work, however, and received and treated hundreds of people with alleged success. The disease spread through the town of Marblehead and the inoculations were held responsible. A party of men from the town set fire to the hospital and it was burned to the ground. Gerry and his associates were highly incensed. Two of the offenders were arrested and put in the Salem jail. Five hundred Marbleheaders

battered the doors of the jail down and rescued the two prisoners before the militia could arrive. Then the sheriff at the county seat, Salem, called out five hundred deputies and marched to Marblehead only to find some seven hundred armed citizens ready to receive them. A truce was declared and the "Smallpox War" in Marblehead was over temporarily. Laments over inoculation arose in other parts of New England. Four years later Reverend Bunker Gay, a New England clergyman in Vernon, Vermont, and a pronounced disbeliever in vaccination, composed the following touching epitaph in memory of one of the younger members of his flock:

"Here lies, cut down, like unripe fruit,
A son of Mr. Amos Tute,
And of Mrs. Jemima Tute, his wife,
Called Jonathan; of whose frail life
The days all summed, how short the account,

Scarcely to fourteen years amount,
Born the twelfth of May was he
In seventeen hundred and sixty-three;
To death he fell a helpless prey
On April v. & twentieth day,
In seventeen hundred seventy-seven,
Quitting this world, we hope, for heaven.
Behold the amazing alteration
Effected by innoculation:
The means employed his life to save
Hurried him headlong to the grave."

People of the town were enraged against Gerry and for a time he discontinued his official associations with Hancock and the Adamses. It wasn't long, however, before the War of Independence united the people of Massachusetts as well as those of the other colonies.

Marbleheaders Extinguish Salem Fire

When the great fire of Salem occurred in 1774 it was put out by Marblehead men. The Salem people lavished high sounding resolutions on the Marbleheaders and, in the way of more substantial remuneration, gave them 132 breakfasts and took the chill of the salt air out of their bones with several dozen gallons of free gin. It didn't require much stinting on the part of the Salem people to dole out 132 breakfasts but the gin cost real money.

Military History

Old Fort Sewall at Marblehead was built about 1742 and named in honor of Chief Justice Sewall of Massachusetts, one of the great lawyers of the town and a grandson of Samuel Sewall, another

chief justice of Massachusetts. Samuel Sewall was one of the commissioners who, in 1692, tried and condemned the Salem witches. Five years later Sewall took the "blame and shame" of the affair and during the remainder of his life set apart a day each year in which he fasted, meditated and prayed in atonement for his error.

Sir William Pepperell recruited most of his men in Marblehead for the 1745 expedition against Louisburg. French privateers who ravaged the coast of Massachusetts had found shelter under the guns of Louisburg and there was great rejoicing in Marblehead when Louisburg fell. Marblehead nearly had its Lexington when Colonel Leslie of the British Army landed there February 26, 1775, on his way to Salem to forcibly remove a piece of ordnance. The people of Salem were apparently better orators than those in Boston since they overcame the British with argument alone. When Leslie and his men returned to Marblehead, they passed in review before a thousand local militia ready to dispute their passage if they did not embark peaceably.

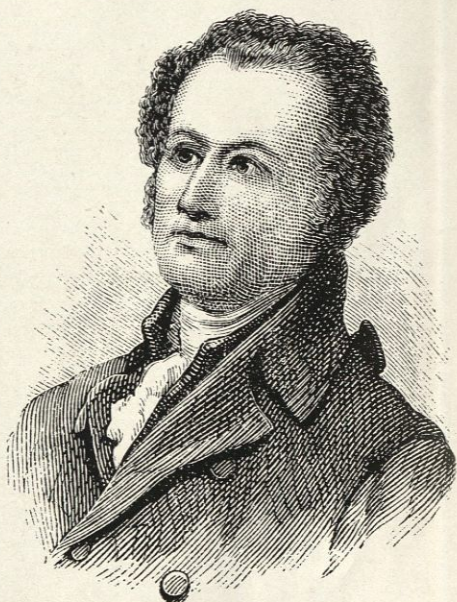
While many people know that the elite of the Continental Army were called "Minute Men," not so many are aware that the first "Minute Men" were organized in Marblehead. A town meeting was held there on the 10th of February, 1775. It was resolved that an organization should be formed to assist in defending the "rights and liberties of All America." The members of the organization were to be properly disciplined and instructed in the arts of war. When in the service, captains were to receive six shillings a day, first lieutenants four shillings and eight pence and second lieutenants four shillings. Privates received two shillings a day while non-commissioned officers, clerks, drummers and fifers each received one shilling more in recognition of their administrative ability, clerical knowledge or prowess in pounding a drum or tooting a fife. A vigilance committee of fifteen was appointed to check the activities of the Jacobites in the village who were to be silenced or expelled.

Elbridge Gerry of Marblehead advocated a war for independence in the First Continental Congress and his name is among those on the immortal Declaration of 1776. The Twenty-first Provincial, afterward the Fourteenth Continental Regiment and frequently called the Marine Regiment,

was composed entirely of Marblehead men. It was first commanded as a regiment by Colonel John Glover; later it was made a part of his brigade when Glover became a brigadier general.

When the Continental Army was mobilized at Cambridge, the Marbleheaders made fun of the appearance of the Virginians and pelted them with snowballs. When Washington arrived he pacified the infuriated Virginians. At the battle of Long Island, Marblehead fishermen conveyed Washington's field artillery, ammunition, provisions, cattle, horses, carts and 9,000 men across the East river. This retreat has often been pointed out as an example of Washington's generalship. Without detracting from his tactics it may safely be said that the feat could not have been accomplished without the assistance of these seafaring men. Likewise, at Trenton, Marblehead fishermen rowed the boats and led the advance to victory over the Hessians. On both occasions Glover directed the Marblehead boatmen.

General Glover was a member of the body which court-martialed Major Andre and he served as officer of the day when



General John Glover

Andre was executed. In 1812 the men of Marblehead enlisted joyously to retaliate for the ruination of maritime interests by the English. When Gerry became Vice

President of the United States in 1812, the citizens of Marblehead accepted this honor as part payment of their losses which were more than those of any interior town in Massachusetts.

When the Civil War broke out, three companies of Marbleheaders were in Faneuil Hall before any other New Englanders arrived. Enroute to Washington, one of the captains stopped long enough in Philadelphia to "grind his sword" and most of the men wrote their names on bits of paper and pinned them to their clothing, expecting a hostile reception and possibly death at Baltimore.

Naval Traditions

The American Navy was born at Marblehead when the schooner "Hannah," the first American warship, was built, outfitted and manned there. The "Hannah" was regularly commissioned on Septem-



Unloading fish

ber 2, 1775, by General George Washington who derived his authority from the United Colonies.

If we can believe John Adams, John Manly of Marblehead captured the mortar which drove the British out of Boston and the same man, not Paul Jones, was the first to raise the American flag on an American warship. Commodore Tucker, a townsman of Manly, captured more British ships, guns and seamen than any other captain in the service of the Thirteen Colonies, not excepting Paul Jones.

Jones, Caledonian-like, silently accepted credit for the work of Manly and Tucker. He did not, however, receive proper credit for services begun in 1781 under Catherine The Great of Russia. As an admiral in Catherine's service, he defeated the Turks in the Black Sea but the jealousy of his

fellow officers brought about his recall to St. Petersburg and finally his expulsion from Russia. Jones, bitterly disappointed, lived in retirement in Paris and died there in 1792 at the age of forty-five. He was buried in the cemetery for foreign Protestants in Paris where he rested in an unmarked grave in a forgotten cemetery for 113 years; Admiral Porter located the grave, identified the remains and escorted them to America with a fleet of battle-ships. The "ingratitude of Republics" was thoroughly demonstrated in the case of this native of Scotland who made the United States his adopted home.

James Lawrence, American naval officer, born in Burlington, New Jersey, in 1781, distinguished himself in the war with Tripoli. He sank the British ship "Peacock" off Demerara, after which he was placed in command of the frigate "Chesapeake" in Boston harbor. With a new crew he engaged Captain Brooke of the "Shannon" and was mortally wounded during the battle. His final order, "Don't give up the ship," given while he was being carried below, has become an American naval classic. The people of Marblehead watched this naval duel with great interest for many of the men on the "Chesapeake" were Marblehead seamen.

Old Ironsides obtained nearly all her crew there. At the close of the War of 1812 over five hundred Marblehead men were in Dartmoor and other British prisons. The alleged depression of 1932 is a boom period compared to economic conditions in Marblehead after the close of the War of 1812. But the history of Marblehead, like that of Gloucester, is one of daring, fortitude, hardship, heroism and adventure. The Marbleheaders stuck to their rock and in a few years the newly established shoe industry revived their fortunes.

Landmarks

St. Michael, Protestant-Episcopal church, built in 1714, the old Town Hall erected in 1727, the Lee mansion which dates from 1768, and the old Brig and Gerry house where Elbridge Gerry was born, are all standing.

A century ago the old homes of the Sea Kings were proudly pointed out as reminders of Marblehead's grandeur; Joseph Story, associate justice of the United States Supreme Court for thirty-four years, was born in one of these old houses. The decisions of Chief Justice Marshall

were largely influenced by the opinions of Justice Story. The Lee mansion, built by Colonel Jeremiah Lee, was graced with elaborate furniture and splendid paintings as long as it remained in the possession of the Lees. This mansion cost more than \$50,000 in days when material and labor



The Town-House

were cheap. Washington and Lafayette were received there as well as many other notable figures in American history.

Literary Associations

Whittier's ballad, "Skipper Ireson's Ride," gave "Old Flud Oirson" more poetic fame than any other resident of Marblehead. Whittier took advantage of poetic license for Flud's real name was Benjamin; some other details of the ballad are also erroneous. Longfellow built his "Fire of Driftwood" around old Fort Sewall, dismantled before the poem was written. Fort Sewall rose to its highest pinnacle of fame on April 3, 1814, when the "Constitution" was pursued by the British frigates "Tenedos" and "Endymion" and ran in under the protection of Fort Sewall's guns. The Sabbath peace of the day was broken; heavy cannon were sent over from Salem, artillery came from Charleston and the New England guards of Boston marched to the rescue of the fort and the ship. The British ships withdrew before these combined forces could be brought to bear upon them.

Dr. Oliver Wendell Holmes made the fortunes of Sweet Agnes Surriage and Sir Harry Frankland the subject of his ballad, "Agnes." Dr. Holmes may have made his classic more interesting had he known that Sir Harry was a descendant of Oliver Cromwell. In 1742 Sir Harry, who was

then Collector of the Port of Boston, made a trip to Marblehead to oversee the erection of Fort Sewall. He stopped at the Fountain Inn where he observed a lovely girl engaged in scrubbing the steps:

"Bent o'er the steps, with lowliest mien,
She knelt, but not to pray;
Her little hands must keep them clean,
And wash their stains away."

Agnes was shoeless and stockingless, her legs and feet were pretty; Sir Harry observed that her face matched them and he gave her a coin to buy shoes. He carried her off to Boston and tried to force her on society but the culture of that day was anti-socialistic. She was barred from polite society but her natural talents overcame handicaps of early environment. She cultivated music and flowers and, with Sir Harry, made a trip to Europe. Upon their departure, Sir Harry's mother and relatives bade her a chilly farewell. They were living in Lisbon when the earthquake occurred. After much searching Agnes found Sir Harry buried under a heap of stones, mortally injured but still alive. Up to this time she had been his common-law wife. Two knots were tied before he died; they were married immediately in Lisbon



"Hannah Binding Shoes"

by a Roman Catholic priest and again on the way to England by a Protestant minister.

If Lucy Larcom had written nothing but "Hannah Binding Shoes," it would have made the poetess and Marblehead famous.

Ecclesiastical History

Marblehead had its "Old North" church, later known as Stone church. A pioneer New England church, it is perhaps unnecessary to add that it was Congregational. St. Michael's church, built in 1714, had as its second rector, Reverend David Mossom; he had the distinctive honor of marrying George Washington to Martha Custis. Parson Bartlett, one of the great preachers of early Marblehead, included in all of his prayers an appeal for those "who go down to the sea in ships, and who do business on great waters," * * * that they "be blessed with perpetual calm."

When Whitefield came to Marblehead, he inquired where they buried their dead since he could see no suitable place in this rocky townsite. Running true to form, the sturdy Marbleheaders located their cemetery on what was later and at present called the "Old Hill," one of the rockiest places in the entire town. Old "Puritan ministers repose peacefully there under laudatory Latin epitaphs." In the same cemetery are the remains of scores of fishermen, including those lost in the gale of '46 when a dozen vessels went down, carrying with them sixty-six men and boys.

Reverend John Barnard was a strong character and probably the most noted pastor in the history of Marblehead. When he was called to Marblehead there was only one church in the town. The majority of the congregation voted for Barnard; a strong minority favored Reverend Edward Holyoke. Barnard was not afraid of competition and refused to accept unless Holyoke would also go to Marblehead and form a new church with Holyoke's followers—a unique way of getting rid of minority stockholders. This arrangement was made in 1715. Twenty-two years later Barnard was invited to become president of Harvard College. He had a fitting sense of values, realized his shortcomings, insisted that Holyoke was a better man for Harvard and so advised the overseers of the institution; his advice was taken. Barnard and Holyoke are big names in educational circles in the United States. It would require some searching to find a fishing village today from which two men could be selected for the presidency of Harvard University. With characteristic New England fortitude, Barnard, while suffering from sciatica, preached for

ten weeks on one leg without letting his congregation know anything about it. This and many other events of his life were revealed during his last days when he sent his autobiographical manuscript to Yale College.

When Barnard entered on his pastorate at Marblehead there was not a foreign vessel in the harbor. Through his efforts and those of Joseph Swett, Marblehead became noted for exporting fish; by 1740 there were 150 fishing vessels bringing fish into Marblehead with one-third as many carrying them to Bilbao and other Spanish ports. When the sardines were returned to their homeland they were "imported from Spain."



"Old North" Congregational Church

Two hundred years ago Barnard made the following statement on temperance conditions in Marblehead: "Nor could I find twenty families (in Marblehead) that could stand on their own legs; and they were generally as rude, swearing, drinking and fighting a crew as they were poor." It is too bad that Barnard cannot continue his survey in these days of Prohibition enforcement, comparing conditions in Marblehead two centuries ago with those at present.

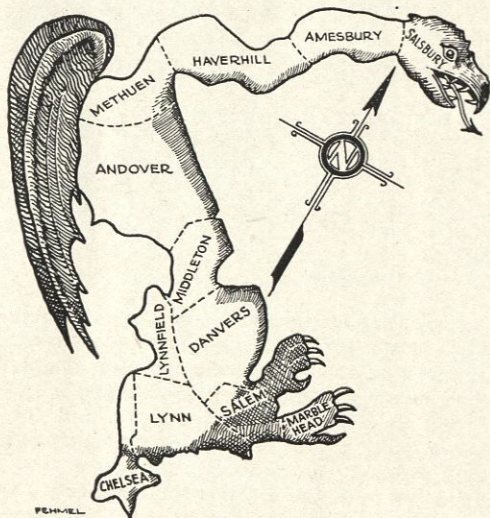
Maverick

Isaac Allerton, a Mayflower pilgrim, was one of those who went out valiantly

with Miles Standish to treat with Massasoit. He was said to have the best business head of any man in his community and naturally fell out with the other New Englanders. He moved to Marblehead, became an exporter of fish and made a handsome fortune. Maverick, his son-in-law, cooperated with him, competed with other fishermen and picked up his share of "unclaimed pisces." Samuel Maverick, a descendant, was able to cut out cattle branding overhead since his ranch occupied an island in Texas. His unbranded cattle were called mavericks in distinction to those of his neighbors which were branded. Avaricious cattlemen built up herds by branding stray, unbranded cattle, called mavericks, and when the process was too slow they improved on it by detaching branded cattle from main herds. When branded cattle became "maverick" stock it was necessary to re-brand them. This led to the ingenious devising of cattle brands; for example a plain "H" might become a "J H" by making a branding iron with a curl extending down from the left side of the "H."

Gerrymander

Gerry, when governor of Massachusetts, was charged, improperly perhaps, with remodeling Essex district for political pur-



Gerrymander

poses. Gerry's friends said the work was performed in the interest of good government; his enemies tried to sully his reputation by attributing ulterior motives. When the map of the district appeared it

resembled some strange, fantastic animal and lent itself readily to cartoon purposes. Its resemblance to the imaginary salamander was noted; an artist put claws on the Marblehead and Salem divisions, wings on Methuen and Andover, a beak on Salesbury and named it a "gerrymander." From Gerry's time, remodeling political districts has been known as gerrymandering.

Yachting

Marblehead has been a yachting center for a hundred years. As long ago as the '60's and '70's, one of the great events was the arrival of the New York yachts to anchor in the harbor the night before the races. Many of the villagers went to the shore to discuss the boats and place small bets on the races; others used dories to inspect these handsome crafts from the American metropolis.

Marblehead Today

Over fifty years ago it was predicted that the coves and headlands of Marblehead would become the property of outsiders seeking sites for summer residences. In fact the invasion began fifty years ago and has continued since. Most of the nomads were driven out in the '60's and '70's and the shanties occupied by them demolished, although as one writer said, "Even these abominations set up in the holy place cannot seriously mar its beauty and picturesqueness." Half a century ago a noted writer visited Marblehead and made the following comment: "While rocks and sea remain, and clouds and sunlight deck them with a thousand varying colors, there will be solace here for weary brains and hearts, haply made sweeter if with the natural charm there mingles some recollection of the parts which the old town once played in comedies and tragedies, which at the time were full of interest alike to actor and beholder."

TRUE COURAGE

True courage is not the brutal force
Of vulgar heroes, but the firm resolve
Of virtue and of reason. He who thinks
Without their aid to shine in deeds of arms
Builds on a sandy basis his renown;
A dream, a vapor, or an ague-fit,
May make a coward of him.

—Whitehead.



Polar Year Activities Under Way

Buildings of the Polar Year Station are being constructed at the Alaska Agricultural College and School of Mines at Fairbanks, Alaska. Part of the work on the electrical variation building was completed in August. Two buildings will be constructed soon for magnetic observation; another one will be built and used for control work in atmospheric-electricity. Photographic records of the three magnetic elements, horizontal intensity, vertical intensity and declination will be made. This work will be done with three independent sets of instruments. The Farthest-North Collegian, under date of September 1, 1932, published an interesting account of the proposed work, excerpts from which follow:

"In addition to the well known magnetic field and its associated electromagnetic phenomena the earth as a whole has been found to have always a negative charge. We commonly think of air as an insulator but the earth's atmosphere is in fact far from a non-conductor. Hence because of the constant negative charge of the earth and the enormous area in contact with the air there is a continuous flow of electricity outward from the surface of the earth under normal conditions. * * *

"Incidentally it might be stated that the equipment to be used for the conductivity measurements at the College Station is unique. It is the only self-contained unit for the continuous registration of the phenomenon in existence and only two or three recording units for air conductivity are in use anywhere. * * *

"From the foregoing it will be seen that the program under way at the 'College-Fairbanks Station' as it has been officially designated, is a rather ambitious one. In fact, it should prove to be the most important and most completely equipped observatory of its type in the world. A station here or there may emphasize more strongly one or two features of the work but none so far as is known will have a program as complete or equipment so varied." * * *

Auroral observations will be continued, also research work on radio transmission.

The construction of the buildings is under the direction of F. P. Ulrich, observer in charge of the Sitka Magnetic Observatory of the U. S. Coast and Geodetic Survey, who will remain at the col-

lege until the construction work is completed and the apparatus in running order. K. L. Sherman of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, E. R. Johnson and Ralph Bennett of the U. S. Coast and Geodetic Survey will be stationed at the college during the year. W. J. Rooney of the Carnegie Institution of Washington is in charge of installation work of ground lines, electrodes, loop and recording equipment.

The college is to be congratulated on its participation in international research work. During the coming year 120 stations belonging to thirty-four nations will participate in "The Second International Jubilee Polar Year."

L. D. ANDERSON

Under date of September 12, 1932, we received a letter from Mr. L. D. Anderson, former chief engineer of this company who has returned to Russia. Mrs. Anderson and son, Daniel Anderson, visited Mr. Anderson in Russia, arriving in Leningrad June 29 and remaining until August 6. Mr. Anderson reports that Mrs. Anderson and the son found Russia very interesting. He also reports that there are only a few Americans left in Russia at the present time. The engineering group with which he is associated has been reduced from twenty men to ten; five of these are former employes and five are new men.

Mr. Anderson sends regards to all former friends and associates.

IT PAYS TO ADVERTISE

The doctor was sitting in his office one day when the telephone rang.

"Is this Dr. Blank?" inquired a female voice, the owner of which was evidently laboring under great excitement.

"It is," was the reply.

"Well, you are wanted at the butchers' picnic right away."

"What has happened?" asked the doctor, as he reached with his disengaged hand for the inevitable little black bag.

"Oh, nothing," was the reply. "The boys want you to come up here and join the union."



We Believe It

YOUR NOSE KNOWS

Due to the untiring efforts of research students and their fellow workers, who sacrificed their eyesight temporarily while playing "What's burning," cigarette smokers are now able to visually pick out their favorite brand. A man usually asks for a package of his favorite brand while a woman indicates that she wishes to purchase cigarettes. The correct inquiry at this juncture is, "What kind does your father, brother or husband smoke?"

Blindfold tests are now being run to determine what kind of perfumed hosiery women prefer. There was something wrong about the olfactory nerves of those who took the test or they were thoroughly perfumed for only six out of a hundred noted that the sox were scented at all—that is consciously. When they recovered consciousness, fifty per cent of them picked narcissus, twenty-four per cent selected fruit mixture (probably banana oil), eighteen per cent sachet, while eight per cent picked the unperfumed ones, beating the first test by two per cent.

Anyone who has fished for bullheads in swamp creeks in the east or who has attended social functions in bamboo shacks in the Philippines will appreciate the necessity for "mosquito repellent" sox or stockings. A bunch of girls were recently sent to the swamps, each wearing one untreated silk stocking and one "mosquito repellent" stocking. When the girls emerged from the swamps the bites on their legs were counted. Untreated stockinged legs averaged twenty-one bites, while the treated stockinged legs received no bites. However, a good time was had by all, including the mosquitoes.

HOMITOSIS

Through ridicule advertisers have manhandled the American public into buying a lot of things. If you are not one of the "four out of five," or a would-be orator who makes "everybody laugh" when you start to speak, you are probably wondering "why nobody loves you." The advertisers have another scare word which fortunately isn't so personal in character—homitosis. Homitosis is a sort of indigestion of house furnishings. The primary cause of this disorder is badly matched or badly arranged divans, chairs, lamps, pictures, etc. It can be induced, however, by children turned loose in the

best room; severe symptoms are produced and, in fact, encouraged by dogs like those owned and praised by O. O. McIntyre.

PRESS VERSUS RADIO

Everybody is familiar with the age old nursery story about the wolf who impersonated grandma. This wolf didn't merely "woof" but went right inside and rolled into bed. Granddaughter discovered that grandma's teeth had grown considerably since she last saw her which raised doubts in her mind about the one in bed being her ancestor. Radios are the wolves at publishers' doors. Likewise, these wolves walked right inside and made themselves at home before the publishers knew what it was all about. Now the newspapers are trying to evict them which isn't so easy. So far as the south is concerned, there will be no dual (radio and press) political publicity. The Southern Newspaper Publisher's Association has served notices on Chairman James A. Farley of the Democratic National Committee and Chairman Everett Sanders of the Republican National Committee, that the newspapers will not print radio addresses which have been delivered. Voters who want all the dope must clean their specs and tune up their radios.

COTTON AND FERTILIZER

According to Horace Bowker, president of the American Agricultural Chemical Company, cotton growers in the south have failed to restore to the soil plant food taken out by their immense crops during the past two years. As a result, there will be a decreased yield per acre unless fertilizer is applied. It costs approximately as much to plant, cultivate and harvest a poor crop as it does to produce a good one; just as many seeds are required, just as many miles must be traveled and practically the same amount of work done for both. It is Mr. Bowker's idea that people should cultivate cotton intensively and he suggests that they could reduce their acreage by half, apply fertilizer, do less work, spend less money for seed cultivation and harvesting, and derive more profit. According to Bowker's analysis, cotton growers made a profit of \$558,000,000 on cotton from 1922 to 1931. If they had farmed only one-half the acreage and fertilized it well, increasing the yield from 150 to 410 pounds per acre,

Whether You Do or Not

production costs would have been materially reduced and their net income would have been raised to \$7,000,000,000. What is true of cotton is true of most other crops.

THE BUMPER CROP

Returns for 1931 are in, indicating that deaths from motor vehicles reached the new high record of 33,500. Only one other cause of death among men exceeded automobile deaths, heart disease. It will be a race in 1932 between the bumper and the pumper. Against this record, industrial plants reduced employee injury rates 38% while railroad crossing accidents decreased 10%. What has been done in industrial plants, mines, smelters and on railroads can be done on the highways. Intelligent industrial management disciplines heedless workers and authorities must discipline reckless drivers if auto accidents are to be reduced.

GIBRALTAR

Anything which is unusually strong is often called "Rock of Gibraltar," and this is no misnomer for the original is 1400 feet high, seven miles around at the base, within it are storehouses of ammunition and food to withstand a siege of seven years. Some say that there are eighty miles of tunnels in the rocks but this is merely conjecture because the public is not allowed to go through the active tunnels nor visit the real defenses. It was near this rock, which commands the entrance to the Mediterranean Sea, that pirates gathered in the old days and collected revenue from passing ships. These bearded and cutlashed gentry gathered at a town called Tarifa, from which we have coined the word tariff. If you are a Democrat, the word tariff connotes a hold-up; if you are a Republican, the word means that it's a handout.

NUGGETS

Gold carries its own attraction—no one needs to be invited twice to look at gold dust, gold nuggets or gold coins. It has recently been revealed that foreign nations were doubtful that the United States could continue to make payments in gold during 1932. The gold of California is said to have saved the Nation during the Civil War. Men scattered over the western United States working pans, rockers and sluice boxes have now come to the

rescue. Until a miner visited Mr. M. W. Woolley's office recently, our idea of placer gold was confined to small specks observed with difficulty on the bottom of a black pan. During a "color seance," optic organs are stimulated by such remarks as "There's one," "there's another." Then ensues a debate regarding this pyrite and mica scale. There wasn't any doubt about the gold brought into Mr. Woolley's office. Some of the nuggets would weigh as much as fraternity house pancakes; a lot of them looked like dwarf Lima beans. This miner, however, like most others who acquire gold, had to work for it.

PRICE LEVELS AND DEBTS

Debts usually increase rapidly through interest accumulations. On the other hand prices may drop. The British have paid the Americans one-third of the debt they originally owed them in 1919. Now in 1932 England owes the United States twice as much as they did at the end of 1919, measured by commodity values. In 1929 our national income was about ninety-four billion dollars which shrank in 1932 to forty-five billion dollars, less than one-half that of 1929. The cost of government and fixed interest charges are as high in 1932 as they were in 1929 while the "assets" have shrunk and price levels have dropped. Some economists have suggested that the national income should be restored to the more than ninety billion dollar level which was reached before deflation. They say that this can be done by raising the price level, cooperating with the Federal Reserve system, employing the activities of the R. F. C. and using trade acceptances in place of money. Others would like to reduce the government expenditures to a point below the government receipts and keep them there until we are out of debt.

SWEETENING THE NATION

Ninety-two per cent of candy business is in ten cent, five cent and one cent package goods. Millions of little hands reach up every day asking shopkeepers "Gimme" one, two, three or more of "them." The recipient is the king of the gang until the goodies are dispersed. Chocolate covered bars constitute the largest selling item today. Farmers should be thankful that milk is usually mixed with the chocolate, giving dairy products a boost.

Utah Railway Company Notes

A. J. KIRKHAM, Correspondent

Martin, Utah

On Sunday, August 28, such a large volume of water came down Hardscrabble Canyon that the opening under the Utah Railway Company tracks at Martin was of insufficient size to handle the flood waters. This resulted in the water overflowing the yards, leaving a heavy deposit of soil, rocks, and debris. Fortunately no great amount of timber or trees came down during this flood and the opening under the yard tracks was in no way blocked. Had this been the case the yards would have been badly flooded and undoubtedly severe track damage would have resulted. This cloudburst was the only storm that has caused any considerable alarm for roadbed on our line during the entire season and at this late date it is very unlikely that we will be harrassed with any additional cloudbursts or severe rain storms.

Monday, August 30, bids were closed for positions of entire work train and ditcher crew. Work train was placed into service in the Martin yards cleaning up the accumulation of rocks and mud, resulting from the previous day's flood. This crew worked approximately the entire following week in the vicinity of the Martin yards and since that time has been engaged in various locations on the main line and branches, principally in the empty yards at the various coal camps preparing to take care of the winter's service.

During the past month business conditions have warranted placing in service two additional crews at Martin and one additional main line crew operating between Provo and Martin. This action caused the return of approximately thirty employees who have been out of service from three to six months.

R. E. Connor, former material clerk, who has been engaged in the operation of motor cars for the Maintenance of Way Department during the summer, was recently recalled to service in the capacity of M. P. & C. clerk at Martin. W. M. Bates, operator who formerly resided at Martin and who for the past year has been a resident of Provo, was recalled to service in the capacity of operator at Martin. One additional car clerk, H. F. Tucker, was returned to service in the

Provo joint office; this position was formerly held by Mr. Tucker.

It was with sincere regret that we learned of the untimely death of Mrs. Frances Beard, daughter of Engineer and Mrs. C. F. Johnson, at Martin on the morning of September 7. Funeral services were conducted at Helper on September 10 and the body was moved to Provo for interment in the Provo City cemetery on the following day. Our heartfelt sympathies are extended to the bereaved family.

During the past month Superintendent Vaughan, in order to be near to his work at Martin, acquired one of the Utah Power & Light Company's residences at Martin and is now nicely situated at this point.

Freight Accountant Greene, as well as Material Accountant Dorsey, from the Salt Lake office were recent visitors to the Martin-Kingmine district checking up and handling various items of business in connection with their respective departments.

At the recent Republican county conventions held in Helper and Price, Superintendent R. J. Vaughan was nominated for the position of four-year county commissioner by an overwhelming majority. At the present writing we anticipate that his election will follow by as large a majority as his nomination. More power to our superintendent.

A very optimistic wave seems to be spreading over the mines in this locality and would indicate that business conditions are gradually on the improvement from the number of men who have recently been put back to work in the various mines. While business is not as brisk as it was a year previous, there has been considerable improvement within the past thirty days. It is always anticipated that from four to six months good business is to be had by the mines in Carbon county and naturally this increases the service of the railroads and in turn gives a large number of men employment. We look forward to better business conditions within the next thirty days and anticipate being able to recall to service a large number of train and engine men who have been out of employment since early spring.

After making diligent inquiries, giving much thought and deliberation, Dispatcher R. C. Sheldon recently succumbed to the purr of a Ford V-8 DeLuxe coupe. First class automobiles have been a hobby of "Bob's" and the satisfaction of his new purchase is indicated by the smile that he is now wearing.

Dispatcher G. D. Wood, who has been residing at Price, Utah, for the past two years, recently moved his family to Helper, Utah.

ARE WE LOSING OUR INDEPENDENCE?

The American "Declaration of Independence" was revealed to the world in 1776 and the American colonies were freed from the absolutism of the British government rule. American democracy was created and began to grow and expand.

That "Declaration of Independence" was a breaking away from political and governmental bonds, and the establishment of political independence, and the rights to the "pursuit of happiness."

Since 1776 the American people have allowed themselves to become engrossed with the supposed "pursuit of happiness" so that they have forgotten how to initiate and help themselves. They have become so dependent on others that they cannot think clearly for themselves.

Through alleged specialized training for particular jobs, we feel that we are unfitted for any other kind of work except the line in which we are trained. We bought whatever we wanted, to enjoy it while we were earning the money to pay for it rather than deny ourselves until we had earned and saved the money to buy. This has taken away our financial independence and self-respect.

Perhaps we cannot be trusted with our independence. At least conditions would indicate that we manage our affairs of home, society, industry and government in such a manner that we will be unable in the future to retain the independence and freedom our early Americans enjoyed and of which we have boasted.

It is true that the most of the hardships we pass through are imposed by ourselves and the matter of the limitations of our freedom and liberties are no exception. Does the educational program for our children overlook this fundamental fact?

East Chicago Notes

E. C. SPENCER, Correspondent

The record of lost time accidents for the first six months of this year shows a decided decrease compared with the first six months of the previous year. This proves that great efforts produce results. We hope the good work continues.

George Eppl is the proud father of a ten pound baby boy, born September 9. The employees of the U. S. S. Lead Refinery offer their heartiest congratulations.

The baseball fans of the plant are looking forward to the World Series with great interest. At present it looks as though the finals would be played off between the Chicago Cubs and the New York Yankees.

Ben Smoler of the store room was badly shaken up a few days ago in an automobile accident. While driving a Buick sedan on 120th and Lake Streets in Whiting, he was hit by another car; the Buick turned over and was damaged considerably. The only thing Ben could remember was making a hurried exit through one of the car windows.

John Knaver is training for the winter bowling season, which will get under way in the near future. We all wish Johnny a successful season and hope his team comes through a winner.

Frank Sabo is the chairman of the entertainment committee of the Good Fellows Club and deserves a lot of credit for the fine entertainment this summer. The Good Fellows Club has been sponsoring street dances with great success.

Gertrude Vanderhoof enjoyed a short visit to South Haven, Michigan, during her vacation.

Frank White was away from the plant for a few days on account of illness. He is back on the job now and feeling better but is bemoaning the fact that he lost eight pounds.

Since Louis Balint's favorite horse, "Typhoon," died, we are wondering what other pony he will back.

Courage ought to be guided by skill, and skill armed by courage. Neither should hardiness darken wit, nor wit cool hardiness. Be valiant as men despising death, but confident as unwonted to be overcome.—Sir P. Sidney.

Utah Welfare Associations

UNITED STATES SMELTING REFINING AND MINING COMPANY

U. S. MINE WELFARE ASSOCIATION

A regular meeting of the U. S. Mine Welfare Association was held September 5, 1932, at the Niagara Tunnel office at which time the Association authorized expenditures as follows for September, 1932:

Cramer Floral Company, Heber	
Johnson funeral	\$ 5.00
Crisanto Rodriquez	25.00
Mrs. Myrintha Johnson, widow of Heber Johnson	100.00
	<hr/>
	\$130.00

A special meeting of the U. S. Mines Welfare Association was held on September 13 for the purpose of taking up the question of helping U. S. employes who were burned out during the big fire in the Highland Boy District, September 8, 1932. The Association authorized the following payments:

John Pezel	\$100.00
Joe Berklon	100.00
Jose Lopez	100.00
	<hr/>
	\$300.00

LARK WELFARE ASSOCIATION

At the regular meeting of the Lark Welfare Association, September 6, 1932, in

the Lark Mine Office, the following claims were approved for September, 1932:

Raymond J. Welch	\$ 15.00
Mrs. Ethel Slater	15.00
	<hr/>
	\$ 30.00

U. S. EMPLOYES' WELFARE ASSOCIATION

The following claims were approved in September, 1932, at the Midvale plant:

Don D. Hansen, 6 days, final pay....	\$ 6.00
George Kastanis, 4 days, final pay..	4.00
Harold Long, 9 days, final pay.....	9.00
Clarence L. Palmer, 6 days, final....	6.00
Carl F. Meyers, 7 days, final pay....	7.00
Clifford F. Wengren, 46 days, final	46.00
Heber Louis Peterson, 8 days, final	8.00
Mrs. Melba Deming, 36 days, part..	36.00
Orson T. Jenson, 22 days, part pay	22.00
Howard E. Phelps, flowers for John Kennedy funeral	4.00
John Jackson, donation.....	25.00
Chas. Ephraim Olson, 15 days, final	15.00
Frederick C. Coomber, 5 days, final	5.00
Mrs. Melba Deming, 13 days, part	13.00
Orson T. Jenson, 13 days, part pay	13.00
George A. Bulkley, donation.....	25.00

\$244.00

Total disbursements, Sept., 1932.....\$704.00

NUMBER [REDACTED]



The United States of America

DEPARTMENT OF COMMERCE

BUREAU OF MINES

This is to certify that on July 28, 1932 the United States mine of the U.S. Smelting, Refining & Mining Co. at Bingham Canyon, Utah had 100 PER CENT of its employes trained in first aid to the injured in cooperation with instructors of the United States Bureau of Mines.

Seas Turner
Director Washington, D.C.

Notes from Bingham, Utah

LEONARD MCKINLEY, Correspondent

Mr. and Mrs. L. A. Walker and family, accompanied by Mr. and Mrs. W. Lee Blodgett of Morrison, Illinois, spent their vacation at Moran, Wyoming. They made several side trips into Yellowstone Park.

Mr. and Mrs. Frank Hoine spent their vacation at Santa Barbara, California. Their daughter, Mrs. Nellie B. Clark, returned with them for a short visit.

Heber Johnson died at the Bingham Hospital on August 27, 1932. Mr. Johnson was one of our oldest employes in point of service, having worked for the United States Smelting Refining and Mining Company at Midvale before coming to Bingham.

Mr. Paul D. Davenport spent his vacation with his family in Salt Lake. He made several short fishing trips and up to the present time, tells the best fishing story. Being the last to take his vacation he has an advantage over the rest of the "Waltons."

Shaft sinking operations will be resumed in the Number Two shaft some time in the near future.

In two slow and uninteresting games the U. S. Mine team outplayed the Lark

Dan Reynolds, one of our employes, died at the Bingham Hospital on September 5. He had been employed underground for several years.

Mr. Clifford Mayer has been in Bingham for the past month for the purpose of setting boundary corners for the U. S. Mines and Niagara Mining Companies.



Mine rescue team, U. S. Mines, Bingham; Noel S. Christensen, William C. Sayer, Wilman Carter, Alfred A. Nelson, Walter Abplanalp, Earl Spencer, Ray C. Call, Rulon K. Madsen, Rennold J. Contratto, Leonard McKinley, Ridgeway Spencer have received mine rescue certificates from the United States Bureau of Mines.

The Butler Underground Shovel which was recently secured from Lark is proving to be a great success. At the present time two drifts are being mucked out by the shovel, each drift averaging about twenty tons.

GREY DESERT

By Eugene H. Pressey

Grey Desert, desolate and drear,

What do you have that I hold dear?

I, who have seen December's sun

Achieve Summer's meridian.

The while I dreamed 'neath greening trees

In the remote Antipodes.

Grey Desert—mystic as the sea,

What do you hold that beckons me?

Why do I quit my seas and sails

To tramp once more your crooked trails?

To roam your sage and greasewood brakes,

And know your thirst and rattlesnakes?

Or why do I quit a land of flowers

To sense your arid, lonely hours?

Grey Desert! How I wish I knew

The thing that brings me back to you.



Part of the U. S. Mines baseball team at Bingham: Left to right: standing—Smith, p.; Olsen, 1b.; Cowan, 2b.; Bob Sonne, 3b.; Wayne Sonne, lf.; Nelsen, mgr. Kneeling —L. C. Johnson, p.; Johnson, cf.; Brady, p.; Harker, 2b.; Caulfield, c. Pearce, c., and Adams, ss., were not present.

team to the tune of 7-2 and 23-1. At no time in either game were the members of the Mines team forced to exert themselves. The last game was more of a track meet than a baseball game. The losers gained their one run on an error.

The Devious Paths

WASHINGTON IRVING—RECORDER OF ADVENTURES

Washington Irving, a son of British emigrants, was born in New York City, April 3, 1873, and died at Sunnyside (near New York City), November 28, 1859. By heredity and acquirement he obtained his love for adventure for his father was, at one time, an officer in the English merchant service and before he settled in New York City was conducting a trading business in the Orkney Islands; Irving's mother was a native of Falmouth. Irving was trained for the legal profession but did not practice. He began writing romantic ventures, doing this at first as a matter of amusement. His income was secure so long as his father lived, but after his death the firm became bankrupt and Irving was compelled to resume his literary work as a means of livelihood.

His first writing ventures brought money. He traveled extensively in Europe and secured the position of Secretary to the Embassy in London. He returned to the United States in 1832 after seventeen years absence abroad, during which he received a degree from the University of Oxford. He then began a tour of the western prairies and finally settled himself in a delightful retreat on the Hudson to which he gave the name, "Sunnyside." In 1842 Irving was honored with an appointment as Ambassador to Spain.

Irving had the rare literary faculty of making dry commercial records entrancing reading. His ability to converse with trappers, traders and other adventurers and correctly abstract from them the high-lights of their lives was most remarkable.

Irving displayed good taste in his writings. He championed the cause of those whose stories he narrated. In addition to an easy style, his judgment was excellent and a part of what he has written has been verified in later historical records. On account of his fine literary style and choice of words, United States school readers have, for more than one-half a century, carried one or more of his productions.

Western history owes Irving a debt of gratitude for his "Astoria" and "The Adventures of Captain Bonneville." The west owes its settlement to the spirit of adventure and Irving's stories fired the imagination of the youth from the '40's to the '80's.

What prompted Irving to write "Astoria" and the basis for his information is best told in the introduction.—Editor.

INTRODUCTION TO ASTORIA

In the course of occasional visits to Canada many years since, I became intimately acquainted with some of the principal partners of the great North-West Fur Company, who at that time lived in genial style at Montreal, and kept almost open house for the stranger. At their hospitable boards I occasionally met with partners, and clerks, and hardy fur traders from the interior posts; men who had passed years remote from civilized society, among distant and savage tribes, and who had wonders to recount of their wide and wild peregrinations, their hunting exploits, and their perilous adventures and hair-breadth escapes among the Indians. I was at an age when the imagination lends its coloring to every thing, and the stories of these Sinbads of the wilderness made the life of a trapper and fur trader perfect romance to me. I even meditated at one time a visit to the remote posts of the company in the boats which annually ascended the lakes and rivers, being thereto invited by one of the partners; and I have ever since regretted that I was prevented by circumstances from carrying my intention into effect. From these early impressions, the grand enterprises of the great fur companies, and the hazardous errantry of their associates in the wild parts of our vast continent, have always been themes of charmed interest to me; and I have felt anxious to get at the details of their adventurous expeditions among the savage tribes that peopled the depths of the wilderness.

About two years ago, not long after my return from a tour upon the prairies of the far west, I had a conversation with my friend Mr. John Jacob Astor, relative to that portion of our country, and to the adventurous traders to Santa Fe and the Columbia. This led him to advert to a great enterprize set on foot and conducted by him, between twenty and thirty years since, having for its object to carry the fur trade across the Rocky Mountains, and to sweep the shores of the Pacific.

Finding that I took an interest in the subject, he expressed a regret that the true nature and extent of his enterprise and its national character and importance had never been understood, and a wish that I would undertake to give an account of it.

* * * The work I here present to the public, is necessarily of a rambling and somewhat disjointed nature, comprising various expeditions and adventures by land and sea. The facts, however, will prove to be linked and banded together by one grand scheme, devised and conducted by a master spirit; one set of characters, also, continues throughout, appearing occasionally, though sometimes at long intervals, and the whole enterprise winds up by a regular catastrophe; so that the work, without any labored attempt at artificial construction, actually possesses much of that unity so much sought after in works of fiction, and considered so important to the interest of every history.

Where Wanton Fancy Leads—Rowe

The following excerpt from Astoria frequently appeared in school readers of the last century:

A VISIT TO THE GRIM WARRIORS OF THE WISH-RAM

M'Kenzie was accompanied by two of the clerks, Mr. John Reed, the Irishman, and Mr. Alfred Seton of New York. They embarked in two canoes, manned by seventeen men, and ascended the river without any incident of importance, until they arrived in the eventful neighborhood of the rapids. They made the portage of the narrows and the falls early in the afternoon, and, having partaken of a scanty meal, had now a long evening on their hands.

On the opposite side of the river lay the village of Wishram, of freebooting renown. Here lived the savages who had robbed and maltreated Reed, when bearing his tin box of despatches. It was known that the rifle of which he was despoiled, was retained as a trophy at the village. M'Kenzie offered to cross the river, and demand the rifle, if anyone would accompany him. It was a hair-brained project, for these villages were noted for the ruffian character of their inhabitants; yet two volunteers promptly stepped forward; Alfred Seton, the clerk, and Joe de la Pierre, the cook. The trio soon reached the opposite side of the river. On landing, they freshly primed their rifles and pistols. A path winding for about a hundred yards among rocks and crags, led to the village. No notice seemed to be taken of their approach. Not a solitary being, man, woman or child, greeted them. The very dogs, those noisy pests of an Indian town, kept silence. On entering the village, a boy made his appearance, and pointed to a house of larger dimensions than the rest. They had to stoop to enter it; as soon as they had passed the threshold, the narrow passage behind them was filled up by a sudden rush of Indians, who had before kept out of sight.

M'Kenzie and his companions found themselves in a rude chamber of about twenty-five feet long, and twenty wide. A bright fire was blazing at one end, near which sat the chief, about sixty years old. A large number of Indians, wrapped in buffalo robes, were squatted in rows, three deep, forming a semicircle round three sides of the room. A single glance around sufficed to show them the grim and dangerous assemblage into which they had intruded, and that all retreat was cut off by the mass which blocked up the entrance.

The chief pointed to the vacant side of the room opposite to the door, and motioned for them to take their seats. They complied. A dead pause ensued. The grim warriors around sat like statues; each muffled in his robe with his fierce eyes bent on the intruders. The latter felt they were in a perilous predicament.

"Keep your eyes on the chief, while I am addressing him," said M'Kenzie to his companions. "Should he give any sign to his band, shoot him, and make for the door."

M'Kenzie advanced, and offered the pipe of peace to the chief, but it was refused. He then made a regular speech, explaining the object of their visit, and proposing to give in exchange for the rifle, two blankets, an axe, some beads and tobacco.

When he had done, the chief rose, began to address him in a low voice, but soon became loud and violent, and ended by working himself up into a furious passion. He upbraided the white men for their sordid conduct in passing and repassing through their neighborhood, without giving them a blanket or any other article of goods, merely because they had no furs to barter in exchange; and he alluded with menaces of vengeance, to the death of the Indian killed by the whites in the skirmish at the falls.

Matters were verging to a crisis. It was evident the surrounding savages were only waiting a signal from the chief to spring upon their prey. M'Kenzie and his companions had gradually risen to their feet during the speech, and had brought their rifles to a horizontal position, the barrels resting in their left hands; the muzzle of M'Kenzie's piece was within three feet of the speaker's heart. They cocked their rifles; the click of the locks for a moment suffused the dark cheek of the savage, and there was a pause. They coolly, but promptly, advanced to the door; the Indians fell back in awe, and suffered them to pass. The sun was just setting, as they emerged from this dangerous den. They took the precaution to keep along the tops of the rocks as much as possible on their way back to the canoe, and reached their camp in safety, congratulating themselves on their escape, and feeling no desire to make a second visit to the grim warriors of Wish-ram.

Work Rotation Is Indorsed at Hoover Parley

D. D. MUIR, JR. ANNOUNCES WIDE PROGRAM TO RELIEVE DISTRESS

Adaption to Utah of the plan of the industrial and banking committees of the twelve Federal Reserve districts to alleviate general distress and reduce unemployment was announced Tuesday by Downie D. Muir, Jr., vice president and general manager of the United States Smelting Refining and Mining Company, following his recent return from Washington, D. C., where he attended on August 26 the meeting called by President Hoover of the industrial and banking committeemen. Mr. Muir is a member of the committee for the Twelfth Federal Reserve district and chairman of the Utah committee.

The Utah committee is composed of representatives of all types of gainful activity, who are asked to call upon employers of labor in support of the rotation or "staggering" plan of labor. K. R. Kingsbury, San Francisco, president of the Standard Oil Company of California, and chairman of the Twelfth Federal Reserve district committee, is expected to call a meeting in Salt Lake of Utah employers of labor in the near future. He will report accomplishments of the plan on the Pacific coast.

Firms Use System

Mr. Muir announced that rotation of labor is being practiced by the Utah Copper Company, the United States Smelting Refining and Mining Company, and all members of the Associated Banks and Trust companies of Salt Lake, who are attempting to extend the system throughout the banks and trust companies of the state.

Members of the Utah committee are: Mr. Muir, general chairman; President Heber J. Grant of the L. D. S. church, real estate and insurance; E. O. Howard and Orval W. Adams, banking; D. D. Moffatt, mining; Church P. Castle, paper industry; George M. Gadsby and Orson John Hyde, public utilities; L. S. Mariger, auto transportation and trucks; J. H. Harrop, insurance; John Chester Deal, wholesale trade; Fred S. Auerbach and W. L. Walker, retail trade; F. C. Schramm, drugs; James J. Burke, contracting; Jacob A. Kahn, electrical supplies and equipment; A. N. Johnson and W. H. Harris, Ogden, oil industry; Mal-

colm A. Keyser, warehouse trade; J. F. Fitzpatrick, press; A. S. Brown, president chamber of commerce; and C. T. Keigley, Provo, steel and iron.

Mr. Muir's statement in part follows:

"The Reconstruction Finance Corporation, which was the first of the relief agencies created by congress, and the value of which few people appreciate, is functioning most efficiently. The board is anxiously awaiting the receipt of self-liquidating propositions that will stand up under extreme scrutiny. However, there must be in the state of Utah many projects which could properly qualify under the above requirements, and it is up to the citizens of the state to call to the attention of Governor Dern's state projects committee such projects of this character that they may have in mind.

"One of the seven points in the general resolution passed by the meeting was that of the rotation of labor, staggering of same, or division of jobs recommended by the industrial and banking committee of the Twelfth Federal Reserve district.

"Intensity of this campaign, which will be nationwide, will be equaled only by that used in the sale of the Liberty Loan bonds. In Utah a committee has been formed of men representing the industrial and banking interests of the state. Each member of this committee will act as a chairman of a subcommittee in his particular line, such subcommittees to contact employers of labor and so far as possible place in effect the rotation or staggering of labor in that particular line.

Feeling Optimistic

"In past depressions it is noticeable that New England has been the last section of the country to be affected thereby and the first section of the country to feel the revival. Due to the resumption of the textile industry of New England, where large numbers of men are being reemployed and a large portion of the industry working at 100 per cent capacity, the feeling there is more optimistic than in the past two years and might be used as a criterion forecasting better times.

"In my opinion the present administration has done everything in its power, both through congress and through power vested in itself, to stem the tide of de-

pression in the last four months. Franklin Fort, chairman of the Federal Home Loan Board, which, it is hoped will stem the tide of mortgage foreclosures, stated that he hoped to have his organization functioning throughout the entire country by September 15. The bank for the western section of the country will be located at Portland.

"The board of the Agricultural Loan Association is equally active in getting their organization together, and Salt Lake has been selected for the main Agricultural and Livestock Credit Corporation for the intermountain west.

"Citizens of Utah should feel extremely proud of Wilson McCarthy, a member of the board of the Reconstruction Finance Corporation, whose advice and counsel is given most serious consideration by the board."—Salt Lake Tribune, September 7, 1932.

SUMMARY OF THE BUSINESS SITUATION ABROAD

Renewal of confidence in Germany, the United Kingdom, France, and the Netherlands contrasts generally with a continued low level of industry and trade; in the United Kingdom industrial dullness has been accentuated by the prolonged strike of cotton weavers, while in France a few mitigating factors have developed, including good grain crops, and expected moderate revival in heavy industries. Spanish business has derived some encouragement from the recent passage of long-pending legislation. Business in Czechoslovakia, which reached an extremely low level early in August, has since revived slightly. Favorable crop reports in Canada and the recent rise in wholesale prices have strengthened confidence. Proposed British preference for Newfoundland fish products and prospects of increased iron-ore sales have mitigated the depression. The silk and rayon situation has improved in Japan, giving hope of substantial profits. Optimism is increasing in the Philippines, but business remains conservative. Generally good crops and more active exports have improved the Chinese position.—Commerce Reports, September 17, 1932.

THE CONQUEST OF FEAR

By the way, do you remember the good old days when a policeman's shadow was enough to frighten a criminal?

Salt Lake City Office Notes

W. W. RAGER, Correspondent

Another successful canyon party was held by the Salt Lake office employees in Emigration Canyon on September 17. About sixty participated in the various contests, which were followed by a lunch. In the evening a big bonfire served as a means of getting all together for singing and amusements. It is getting rather cool in the canyons, so this was the last outing for this year. These outings have been very successful, and it is hoped that they will continue in future years.

A. E. Margetts of the Traffic department has returned from a two weeks' vacation which he spent with his daughter in San Francisco. He visited several interesting points in and around the California city.

E. R. Gibson, deputy comptroller, and Mrs. Gibson are enjoying a motor trip to the Pacific coast. They left over the Victory Highway for San Francisco, from there following the Coast Highway to Los Angeles; they will return over the Arrowhead Trail.

H. A. Vent of the Accounting department has returned from a vacation in southern California, accompanied by Mrs. Vent. They traveled by auto, and report the desert as being relatively cool, the intense summer heat having ended.

Earl Russell and family have returned from a trip to the west coast. H. F. Lanros and family also vacationed in southern California as did Miss Afton Margetts of the Accounting department.

Southern California is becoming more popular each year as a vacation section. The great improvement in road conditions makes a trip down there one of hours rather than days, as was the case a few years ago. Twenty hours to Los Angeles is just an easy conservative drive now. As Boulder Dam is but thirty miles from the main highway many vacationists avail themselves of the opportunity to see this wonderful project.

I like to read about Moses best, in the Old Testament. He carried a hard business well through, and died when other folks were going to reap the fruits; a man must have courage to look after his life so, and think what'll come of it after he's dead and gone.—George Eliot.

AX - I - DENT - AX

SAFETY FIRST

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 VIRGINIA M. BAKER Assistant Editor
 HERBERT M. FEHMEI Drawings
 R. E. KIMBERLIN Problems and Puzzles
 A. L. LOGAN Sports

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Pachuca, Mexico	C. A. Fredell
Provo, Utah Railway	Thomas Schott
Salt Lake City Office	W. W. Rager
Seattle	R. R. Russell
Sunnyside	L. H. Duriez

Published once a month for the employees of the United States Smelting Refining and Mining Company, in the interest of safety, welfare and technology.

Salt Lake City, Utah, October, 1932

ADVENTURE

If "interest is the mother of attention," adventure is the father of endeavor.

Longfellow said that history is merely a puppet show; someone comes out and blows a trumpet, a few people hear the noise and it's all over. While this may be true, some have tooted loud enough to be remembered and if we scan the names recorded in history we will find they are all of adventurers.

Adventure lends itself to several meanings but it is usually thought of as something which involves risk and requires courage—the courage is the part which benefits mankind. There has been adventure in religion, war, commerce, invention, exploration, politics, railroading and every other form of human activity.

Mining and farming are always adventures. The excitement of the roulette wheel is tame compared with the possibility of the vein pinching out or the bugs descending on the crop. Miners and farmers are always gambling on the next shot or the possibility of a cold wind.

An era of adventure marks the beginning of an era of progress; at present we are passing through an era of adventure.

On the average, more than a million dollars a month in gold has been turned over to the mint at Denver during the first six months of 1932. A large part of this gold was turned in by people who thought it was more of an adventure to obtain something through courage in a stream bed than to decorate the highways, thumbs pointed in the direction of anticipated rides. The average hitch-hiker doesn't contribute much to human progress and he is generally a psychological depressant; when he flattens the skull of the driver with a club or rock he also becomes a physical depressant.

On the other hand, the adventurous argonauts fill others with enthusiasm, buy gasoline, purchase living supplies, keep a force at the mint busy and provide employment for inventors and mechanics, who, as a result of their endeavors, are turning out gold-recovery machines.

The great adventure in western farming began in the '50's. From congested areas in Europe and overcrowded states east of the Mississippi, people "went west" in response to their desire for an adventure in farming. Ex-soldiers who sought for further adventure in Indian fighting picked out land near the army posts and made homes. Miners who did not strike it rich located on some choice region near the diggin's.

In every center of any size in the east meetings were held with a view toward forming an emigrating company. Where a hundred put their names down, only about ten were on the scratch when the whips cracked. Of these ten, about five turned back as soon as the fresh vegetables ran out; the adventurous five per cent became governors, senators, mining magnates, railroad kings and land barons in the west. The other 95 per cent decorated the hay fields in the summer; in the winter they squirted tobacco juice at the stove in the village store. They were not moved by adventure.

A lot of people have learned during the present depression that wood will burn, fruit and vegetables taste just as well when they come out of glass as out of tin and that there's gold in the gravel. When we emerge from the present depression or begin to call it normal, these adventurers will be ready to start at the crack of the whip. It's a real adventure to live through a depression without losing courage.

Athletic Associations

UNITED STATES SMELTING REFINING AND MINING COMPANY

Reported by A. L. Logan

Accounting Department, U. S. S. R. and M. Co., Salt Lake City

ANNUAL BASEBALL OLYMPIC

The annual baseball Olympic of the United States Smelting Refining and Mining Company between staffs of the Salt Lake office and outside plants, Midvale, Lark and Bingham, was played at Midvale Saturday, October 1. The score was 23-22 in favor of the outsiders. Enthusiastic fans supported their respective teams.

The Olympic is attracting national attention. "Coming events cast their shadows before"—does the following portend that Babe Ruth, who slipped slightly the day after he entered this protest, is looking for a place in the U. S. Classic for 1933 under an assumed name?

Protest

WHEREAS: The annual U. S. Baseball Olympic is promoted as a strictly amateur event, and as it has come to my attention that one certain player on the operating staff team is in fact a professional, I, as an interested party, protest the playing in the game of one C. A. Lemke, reputed to be a pitcher, and in support of such protest present the following facts:

Early in the 1900's said C. A. Lemke was playing in this state in the Ogden Professional Ball Team, coming to that team from the Denver Western League after having been blacklisted by the Brooklyn National Club, to whom he had been sold, for his refusal to report. We have a living witness, whose integrity is unquestioned, who at that time was a bat boy for one of the opposing professional teams, who will swear that the above is true, and who will further swear that it is his belief that the said C. A. Lemke is still surreptitiously playing professional ball, basing such belief upon the fact that said witness was unable to hit ball pitched by said Lemke last year.

Further, said Lemke is protested upon the grounds that it is illegal to pitch a ball behind the batter, as was done last year.

THEREFORE, this protest is made before the game begins, and the decision is left to the Salt Lake Office Ball Team, as judges, who shall decide whether such protest is to stand, and their decision shall be final and binding, and if they decide to

let him play, it is O. K. with me.

(Signed) BABE RUTH,

(Seal)

By D. D. M., Jr.

Dated October 1, 1932.

Employees of the Salt Lake City office challenged the quoit throwers of the Midvale plant and received the following cheerfully defiant reply. We will look forward with pleasure to this contest:

"Salt Lake City Office Employees:

"It was a real pleasure to receive your challenge to a contest in Horseshoe Pitching between the employees of the plant and the employees of the Salt Lake office.

"Your challenge is accepted for October 8, 1932, at 2 o'clock p. m. at Midvale, Utah (we have five courts) between two teams for doubles and three sets of singles. Thank you. We hope the day comes soon. Let us at you. Come on.

"Midvale Plant Horseshoe Pitchers,
"By F. J. Schuster."

The Salt Lake Office Singles Tennis Tournament came to a close Monday, September 26, when "Babe" Meyer defeated "Aceball" Victor, 6-4, 2-6, 6-1, in the championship round.

"This tournament was staged to develop a team that will oppose the Midvale "Racketeers" on October 8, due to a challenge from the Midvale plant. "Babe" Meyer, in charge of the Salt Lake office tennis team, has chosen the following men to compete: Singles Matches—Meyer, Russell and Victor; Doubles Matches—Smith-Treharne, Meyer-Russell.

Salt Lake Office Tennis Tournament Results

	Games	Sets	Matches
Meyer	50-23	8-1	4-0
Russell	43-28	6-2	3-1
Victor	41-39	5-4	2-2
Smith	28-46	2-7	1-3
Treharne	26-52	1-8	0-4

Manager George Ecenroad has arranged practices to select his horseshoe tossers for the coming horseshoe tournament, October 8, and will probably turn out a strong team. Such men as Margetts, James, Johnson, Vote, Victor, Busby, Ecenroad, and Logan will give the Midvale boys plenty of competition.

River Gold

By CHARLES KELLY

Author, "Salt Desert Trails"

Member, Utah Historical Landmarks Association

It is almost four hundred years since the southwestern part of what is now the United States was first penetrated by white men. Those early explorers were Spaniards, lured into the barren deserts of New Mexico by tales of fabulous treasures of gold, which they expected to find in the possession of the aborigines, already mined and smelted. On this quest the conquistadores of our southwest were badly disappointed; but they did succeed in exploring an unknown region, thereby adding an immense area to the maps of the known world—a valuable addition to the sum total of human knowledge. As an incident of their travels they were first to discover the great and mysterious river of many names, now known to us as the Colorado.

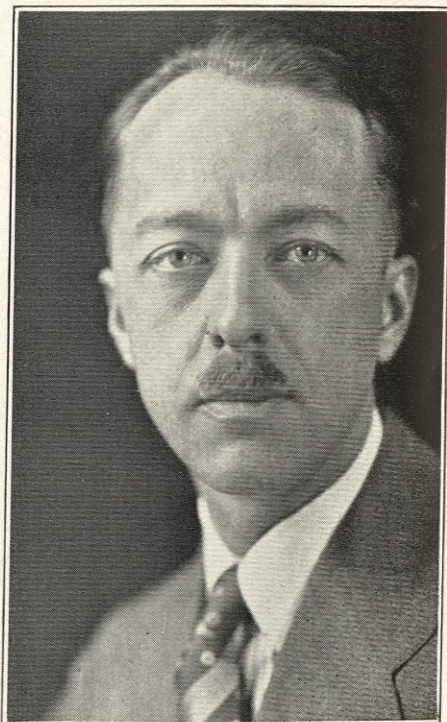
This great river, the course of which was then unknown, presented an impassable barrier to the Spanish expeditions of 1540 and it was not until 1776, two hundred and thirty-six years later, that white men first succeeded in finding a place to cross it. This crossing was made by Fathers Escalante and Dominguez, accompanied by a half dozen Spanish soldiers, in the year of our national independence.

Another period of ninety-three years was to pass before any serious effort was made to discover the course of the Colorado river. In 1869 Major J. W. Powell and a handful of brave companions embarked on the waters of the great unknown river for the purpose of mapping its course and viewing the wonders contained in its mile-deep canyons. The story of that voyage is now the supreme classic of western exploration, preserved to us by the pens of Major Powell and Frederick S. Dellenbaugh.

Since that time there have been several expeditions down the Colorado river; yet it still remains a river of mystery. Only one man, Emory Kolb, ever navigated the entire course from its headwaters in the Rocky mountains to its mouth in the Gulf of Lower California.

It was the writer's good fortune to be a member of a party of five who re-explored a part of the canyon of the Colorado this

summer. The section chosen for our purpose is known as Glen canyon, extending from the mouth of the Fremont or Dirty Devil river to Lee's Ferry in Arizona, a total distance of 185 miles. The principal object of the expedition was to examine that section for prehistoric ruins and remains of ancient man in order to discover, if possible, just where the original Americans crossed the great river when they brought their culture from the Pueblo



Charles Kelly

country of New Mexico and Arizona to northern Utah.

Although the cliff dwellings were not as numerous along the river as we had hoped, sufficient evidence was found to prove beyond a doubt that the ancient path of culture migration from the southwest into Utah was down White canyon from the vicinity of Natural Bridges National Park,

across the Colorado at Hite's crossing and up the Fremont to the vicinity of Torrey, Utah, where it spread out to various favorable localities, its northern terminus being in the Uinta Basin near Vernal. Those wanderers from the southwest stopped for a time on the great river, where they built several prehistoric apartment houses, two and three stories high and containing many rooms. They farmed the sandbars along the river with great success as is shown by the large size and great quantity of corn cobs still preserved in the ruins of their dwellings, some of which date back probably two thousand years.

These sandbars, occurring every few miles in Glen canyon, have seen another phase of activity in more recent times, which would probably be of more interest to readers of a magazine devoted to mining. All through Glen canyon, on every bar, our party found the remains of old sluice boxes, riffles, chutes, pumps, water wheels, dredges and even the boiler of an old steamer—all reminders of a mining boom which struck the Colorado many years ago and which has continued spasmodically to the present day. For be it known that the sands of the river contain gold!

Back in Missouri in 1845 was born a man known as Cass Hite. In his younger days Cass came west to seek his fortune in the mines—but like many another we might name he soon found himself hoisting drinks instead of ore and picking fights instead of rock. He was a man of unusually quick temper and eventually the inevitable happened—he killed a man in a quarrel. Although he pleaded self-defense, he was sentenced to life imprisonment. The confinement broke down his health to such an extent that through the influence of friends he was pardoned at about the age of fifty.

Knowing his weakness for drinking and fighting, old Cass Hite, upon his release from prison in 1883, decided to go as far away from human habitation as possible, where he could live like a hermit and redeem his soul. The place which he chose for his retreat was at the mouth of Trachyte canyon on the Colorado river—the most appropriate spot for a hermitage in these United States.

With nothing on his hands but time, Cass Hite, like all those who have once had the mining fever, began to examine

the rocks near his cabin for signs of mineral; but the red sandstone walls which hid him from the world contained nothing of value. Then, out of idle curiosity, he panned a few pounds of sand and gravel on an old high level bar in his back yard. Much to his surprise he found color in the pan. Carefully working over this river material, he eventually collected a small bottle of fine gold dust, the first ever taken out of the sands of the Colorado river.

Cass Hite showed his little bottle of gold to some passing trappers and later it was seen by a party of surveyors. Word soon passed from mouth to mouth and prospectors began drifting down the river. They all found color—and during the boom Cass opened a postoffice in his cabin called



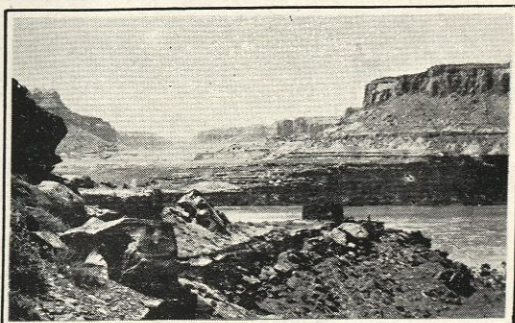
John Wesley Powell
1834-1902

Soldier, Scientist, Explorer

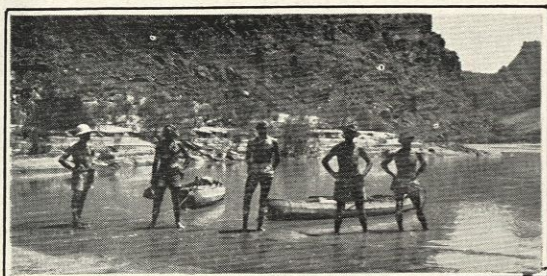
"Hite P. O.," still to be found on some maps. He had planted a nice orchard and vineyard and sold fruit and vegetables to miners who passed his way.

A mere trace of color, however, is about all that was ever taken from the sands of the Colorado. The gold is so fine that it remains in suspension in the water and cannot be removed by the ordinary processes of placer mining. Thousands of dollars have been spent in trying to recover this flour gold, which is found in all of the sands and gravels along the river.

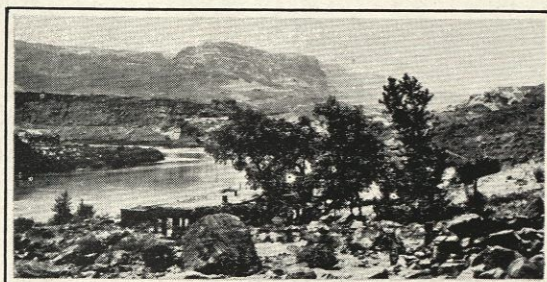
Just above Hall's crossing our party found an old gold dredge abandoned in the



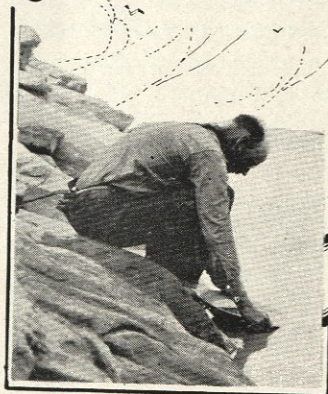
④ OLD INDIAN RUIN, MOUTH OF WHITE CANYON



⑪ END OF JOURNEY



⑫ LEE'S FERRY



LURE OF THE COLORADO



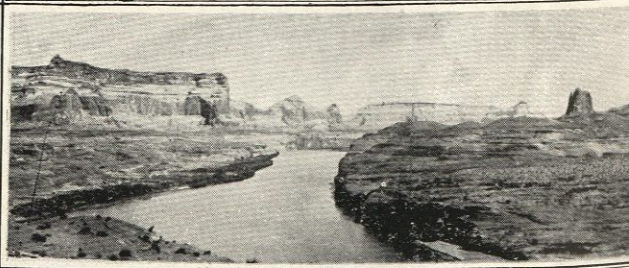
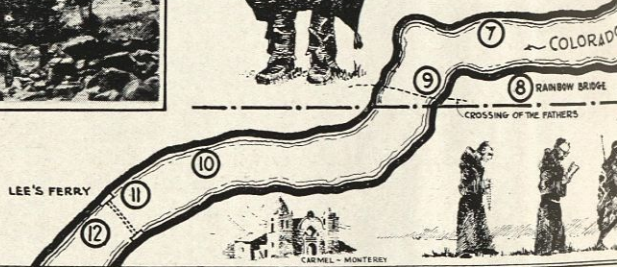
① FROM HANKSVILLE TO THE RIVER

DOWN THE COLORADO


PHOTOS BY CHARLES KELLY
ART BY HERBERT M. FEHMEI




⑥ HOLE IN THE ROCK



⑨ CROSSING OF THE FATHERS ~ ESC




2 LEFT TO RIGHT: SHOEMAKER
HUGHES, STEWARD, KELLY,
BIRNEY.



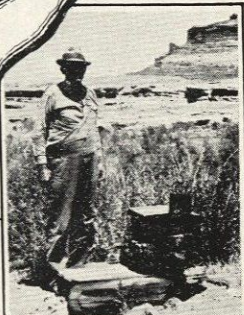
CASS HITE'S CABIN 3




ADO-1932




RAINBOW BRIDGE 6



OLD SOURDOUGH





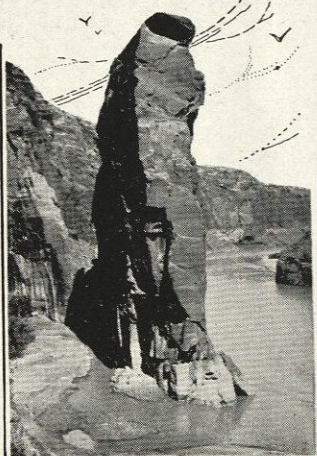
5 TWENTY MINUTES FOR LUNCH



7 RAMPARTS OF THE COLORADO



PLANTE AND DOMINGUEZ, 1776



10 SENTINAL ROCK

river. This heavy piece of machinery was brought to the river by Robert Stanton, leader of the ill-fated Stanton expedition which surveyed the canyon of the Colorado for a railroad right-of-way in 1889. Stanton interested friends in his placer proposition and had a large dredge



Stanton's Dredge

hauled in across the desert at a cost of more than \$100,000. The dredge operated three hours, broke down and when Stanton wired for more money his backers refused to dig up. During the next high water it fell into the river where it remains today.

As we floated farther down stream, we saw in the distance a most peculiar object suspended from the cliff. Upon closer examination it proved to be a most ingenious water wheel, suspended by steel cables. The paddles of the wheel were intended to be turned by the current and the power thus generated was supposed to pump water up to a high level bar above to wash gold out of the old gravel deposits. This machine also represented an enormous expenditure of labor, time and money. It was built by Frank Bennett and Frank Butler in the early 1890's, but was abandoned after proving unsuccessful. At another place a ditch cut out of the solid rock was supposed to bring water

down to a bar from a small dam in the cliffs above.

In spite of the evidence of hundreds of failures, however, gold has actually been taken out of the sands of the Colorado river and the story of this one and only successful project is one of the most interesting chapters of the river's history.

On August 22, 1893, William Mitchell arrived on the banks of the Colorado to investigate some sandbars which had shown color by panning. It was at that time a three weeks' journey from Salt Lake City by pack train. Panning operations convinced Mr. Mitchell that the river bars contained gold in paying quantities, provided some method could be found to save the fine particles which were held in suspension and lost in ordinary operations. The richest deposits were found in clay laid down by the river in quiet water and not on bedrock as is usually the case. This clay was very compact and had to be broken up with a special kind of plow and then pulverized before being put through the separating machine devised by Mitchell. It could be profitably worked only by handling a large volume, necessitating some sort of power plant.

In order to furnish power for his machines, and for the double purpose of transporting the necessary supplies, Mitchell built a small steamboat in Salt Lake City which he dismantled and packed 150 miles to the river on mules. It was brought down over the cliffs at Hole-in-the-Rock crossing, a perilous trail blasted out of the rock by Mormon pioneers to the San Juan country in 1879. The little steamer was reassembled on the river and after one trial trip, on which it performed satisfactorily, was loaded with supplies packed in on muleback over the same difficult trail. These supplies consisted of four tons of coal, two tons of oats, several tons of hay and a year's supply of food for the crew, besides tools and equipment. When everything was aboard the boat sank in the water to within six inches of the gunwales and the paddle wheel at the stern had to be raised before it would operate. To the surprise of everyone, the stout little craft was able to make headway upstream against the swift current, avoiding by inches many dangerous rocks and one enormous whirlpool below Shock rapids. Halfway to its destination the boat was tied up to the bank for the night and part of the load removed from the for-

ward end, allowing the stern to sink below the level of the holes bored for the stern wheel in its original position. Unknown to the weary captain and crew, the hull slowly filled and at one o'clock that night the vessel quietly sank in thirty feet of muddy water, with nearly all supplies on board.

Mr. Mitchell doesn't like to recall this catastrophe but he remembers that he worked nine days and nights without sleep before he succeeded in raising the sunken vessel, salvaging his supplies and cleaning the mud out of the engine. Eventually he succeeded in moving on upstream to the California bar, where the boiler of the steamer provided the necessary power for placer operations.

The steam boiler worked satisfactorily until it broke down. To make repairs it was necessary to send to Salt Lake City for a half-inch nipple. Three weeks were required for the round trip. When the man returned with the nipple it proved to be the wrong size. Another three weeks passed while a second trip was made. Within sight of the river a pack mule fell over a cliff, the nipple in his pack could not be recovered and the third time the round trip to Salt Lake City had to be made. When the engine again started the fifteen-cent nipple had cost \$3,000.

In spite of many such incidents and the difficulties of mining operations so far from the source of supplies, Mr. Mitchell eventually succeeded in developing a successful process of extraction and during the next few years took \$47,000 in fine gold out of the river clays at the California and Klondike bars. He built a trail from Escalante to the Klondike bar, bringing his pack mules down the cliffs over a long series of stairways blasted out of the sandstone. These stone steps, up which we climbed to obtain a view of the Henry mountains, are about the only remaining evidences of the former activity at that place.

For forty years the story of the gold taken out of the Klondike bar by Mr. Mitchell has been luring prospectors to the Colorado river. Scarcely a year passes that does not see several new placer claims staked, or old ones restaked. All the bars along the river are covered with mining monuments—monuments to perilous adventures and blasted hopes.

While our party made the journey without accident, adventure is still to be found

on the Colorado. When we arrived on the river late in the afternoon of July 4, we were met by an old sourdough who told us that on June 26 his two partners had attempted to cross the stream on a raft. The raft struck a sharp boulder and broke up, leaving the men stranded in the river. One, who could swim, dived into the current and was never seen again. The other, after two days and nights on the rock, caught a passing log and was



Frederick S. Dellenbaugh
1853-

Artist, Topographer, Author

carried ten miles down stream, where he made a landing on the opposite side. He then walked back to a point opposite his camp. Unable to build a raft or to swim he was forced to remain there without food for nine days. His partner on the

camp side of the river had no boat, was crippled with rheumatism, and could not effect a rescue. The marooned prospector was hardly able to stand alone when we brought him back in the canvas boat on July 4; he had given up all hope of being rescued. When he once more reached his own camp he swore that his gold-hunting days were over forever. But after a night and a day of rest the man was again ready for the golden trail, walking four miles in the broiling sun to put up some additional monuments on his placer claims.

Since we passed that way in July, mining operations have been started on one of the bars below the mouth of the San Juan. The siren call of gold cannot be resisted. "Hope springs eternal" . . . and so it will always be.

R. F. C. WON'T INTERRUPT THOSE BANK HOLIDAYS

The bank "holiday moratoriums" may well continue, in the judgment of the R. F. C.

Banks in various sections of the country, notably Iowa, threatened with runs, appealed to local authorities to declare holidays, sometimes for five days, sometimes a week. During the holidays, the banks persuaded depositors to sign agreements not to withdraw their funds for a certain period, usually a year. The alternative, depositors were frankly told, would be a bank closing.

Representative Bowman of West Virginia issued a public appeal to President Hoover to have the R. F. C. intervene in the situation. He estimated the amount of deposits tied up in such agreements at \$5,000,000,000, and pointed out that thawing of this amount of buying power would help business upturn.

The R. F. C. is understood to be something less than enthusiastic. Bluntly, the R. F. C. believes the money, if released, would go into hoarding and that the funds are better in the bank than in tomato cans under the corn crib. By the time the "holiday moratoriums" expire, the R. F. C. believes the depositors' scare will be over and business can go on in normal fashion.—The Business Week, September 21, 1932.

Tender handed stroke a nettle,
And it stings you for your pains;
Grasp it like a man of mettle,
And it soft as silk remains.

—Aaron Hill.

Notes from Sunnyside

L. H. DURIEZ, Correspondent

Mr. John Eckman, caretaker at the Sunnyside, and Mrs. Eckman spent their annual vacation with relatives in Durango and Telluride. Mr. Eckman reports that autos are still going strong and the movie shows are well patronized regardless of hard times.

Mrs. Albert Hay and son Melzer returned to Durango for the winter after spending the summer with Mr. Hay who is now caretaker at Midway.

Mr. J. J. Shaw visited Eureka on personal business recently; he reported that the family was well.

Mr. C. E. Rathbun, cashier at Eureka, and Mrs. Rathbun are on their vacation. They are making a tour by auto and plan to visit Denver and Salt Lake City.

Mr. D. D. Muir, Jr., vice president and general manager, paid us a brief visit and made an inspection of the Sunnyside plant.

A number of the former Sunnysiders visited Eureka this summer to take another good look at their old stamping grounds.

A new steel bridge is being constructed over the Animas river at Howardsville to supplant the present wooden structure. After it is completed, fears of being marooned by the early summer floods will be one more thing less to worry about.

There is considerable mining activity in the Animas Forks district. It is reported that a new gold strike has been made on the Mountain Queen ground in Picayune Gulch. Long pack trains carrying provisions and tools are seen passing through Eureka weekly.

This summer the run-off from the melting snows was very gradual and the rains were light, consequently the anticipated floods did not materialize. Remnants of last winter's snowslides are still visible in the gulches around Midway and at this writing the high tops show the first mantle of snow which is the beginning of another winter.

The key to every man is his thought. Sturdy and defying though he look, he has a helm which he obeys, which is the idea after which all his facts are classified. He can only be reformed by showing him a new idea which commands his own.—Emerson.

Midvale Flotation Mill and Smelter Notes

F. M. WICHMAN, Correspondent

W. O. Boberg attended the state convention of the American Legion in St. George, Utah, and the national convention in Portland, Oregon.

We are glad to see E. E. Mortensen back at his old job in the boiler shop.

Jim Lundberg, for many years holder of the title "Potato King," is this season exhibiting onions thirteen inches in circumference.

George Strom is taking Jack Farmer's place as foreman of the machine shop while Jack is visiting Mexico. We are all interested to know what there is in Mexico that attracts Jack Farmer every summer.

Friends of Niels Malstrom sincerely regret hearing of the death of his thirteen-year-old boy on September 23. The lad had been ill for a long time and had experienced much suffering.

Tennis continues to be the popular sport at the smelter. We are indebted to "Kelly" Hunter for the following summary of events to date:

The first tournament ended with Haro'd Canning the victor. The finishing order was as follows: Harold Canning, Den Watts, Bob Foord, C. E. Bartlett, J. L. Meyers, C. A. Lemke, Ralph Wanlass, J. B. Cotter. This group was given the name "Experts" and the rest of the players were termed the "Dubs." Each group then started a league of its own, the results of which were as follows:

EXPERTS		DUBS	
Name—	Pct.	Name—	Pct.
Foord .....	.858	Nelson	1.000
Lemke .....	.667	Beckstead .....	.875
Watts .....	.667	Aylett .....	.750
Canning .....	.667	Rankin .....	.625
Bartlett .....	.500	Hunter .....	.500
Pallanch .....	.375	Nichol .....	.333
Cotter .....	.143	Brown .....	.333
Meyers .....	.000	Greenwood .....	.125
		Wallace .....	.000

As three of the Experts tied for second place, these men are now playing it out, with Lemke thus far in the lead

Doubles are now being played among each group, with the top man paired with the lowest, the second with the seventh and so on. Some very fine tennis has been produced, for instance, Canning and Cotter

played Watts and Pallanch and won only after two and a half hours of play with a final score of 9-7; 7-9; 8-6.

The boys are all looking forward to the baseball game on October 1 and the tennis and horseshoe contests the following week with the Salt Lake office.

Among plant visitors during September were two Chinese mining engineers, Gee Hong Geng and Colonel Chang Lien-Ko of the Nanking Arsenal. They were introduced by W. F. Koch of the Hercules Powder Company. Two Japanese engineers also visited the plant, F. Tajima and a companion of the Sumitomo Besshi Mine, Ltd., Niihama, Japan.

AUTO CAMPS

There are over twenty thousand auto camps in the United States. An auto camp is like a post office, it may mean anything. Many of the auto camps consist of a few trees, a place for a tent and a garage, while others may have one hundred or more luxurious homes and garages. Camps raised hob with the hotels and now there's another form of cottage which may make the camp proprietors speed up to secure an income on their investments. It is now possible to tour the United States without stopping at an auto camp or a hotel—you can invade the home of some of the American citizens who are willing to be inconvenienced if they can pick up a few dollars from the tourists. What you pay in auto camps and private homes depends, as is the case in hotels, on what you want. Ninety-one per cent of the auto camps, kept by fifty New Englanders in New Hampshire, charge 50c to \$3 a day; you get more for your money in New Hampshire than in any other state. Auto camps in Minnesota are the most expensive—where only 24% run between 50c and \$3 a day. After New Hampshire, Kansas offers most for the money, then Missouri; Utah was medium high-priced with 74%; in general it costs more to stop in the wide open spaces of the west than in the congested east. Auto camps charging from \$1 to \$2 a day are the most popular of any.

In this commonplace world everyone is said to be romantic who either admires a fine thing or does one.—Pope.

Items, Literature and Personals

A MAN WITH A HOBBY

One who has a hobby can never tire of life. He always has something of passionate interest. Sometimes the hobby is within the scope of one's vocation. But for the great mass of men it cannot be. In none of the three fundamental types of hobbies (the acquiring of knowledge, the acquiring of things, the creation of things) do the daily tasks give opportunity for self-development or for contributing to the happiness or welfare of others. Most fortunate are they whose vocation allows them the scope and fervor of an avocation.—New York Times.

HUNDRED NEW MEN EMPLOYED BY U. S. COMPANY

An increase, effective at once, of approximately one hundred men in the working population of Bingham, Utah's largest mining camp, is announced by D. D. Muir, Jr., vice president and general manager of the United States Smelting Refining and Mining Company. * * * *

"These are all new jobs," Mr. Muir says. "The men are being assigned to development work entirely. Some are going to the Bingham Bemis, some to the St. Joe and a few to the old Lark mine. Most of the development will consist of tunneling and raising. No increase of ore production is contemplated at the present time."

It is simply a coincidence that the increase of the United States Company's payroll comes immediately after the big fire that left so many residents of Bingham homeless, the increase having been arranged for long before the fire. The employment measure is all the more timely.

A survey of the employment roll of the United States Smelting Refining and Mining Company and its subsidiary companies in Utah discloses the fact that 1,842 men and women are receiving wages and salaries from the companies. This number, Mr. Muir says, is greater than the average number employed in 1931 when mining as an industry was more active than it has been during the current year.

In addition to its metal mines in Bingham and Tintic the United States Company operates smelters, coal mines, railroads and stores.

Mr. Muir recently was appointed a member of the regional committee on

banking and industrial rehabilitation of the Twelfth Federal Reserve district and is chairman of the subcommittee for Utah.—Salt Lake Telegram, September 13, 1932.

FROM NEW ENGLAND TOO

According to a report received this week from the New England Council, industry in New England has shown a decided improvement. The textile mills in many places in the territory are gradually adding employees, and mills which have been closed down are opening again while some plants even report the addition of night shifts. Shoe business has also shown improvement while a number of foundries have increased production.—August "New Haven"—Monthly Publication N. H. Chamber of Commerce.

DENTED, NOT BROKE

The economists, professional and amateur, are at full liberty to figure out to their satisfaction the underlying facts in the following circumstances:

In the midst of so-called "depression" some 2,000,000 New Yorkers were able to leave this hot city and enjoy the delights of the country over the Labor Day weekend.

On Labor Day 70,000 baseball fans, paying an average seat price of around \$1.25, filled Yankee Stadium to witness a double-header.

On Labor Day 38,000 automobiles crossed the new George Washington bridge over the Hudson.

In three years prior to 1930 an average of 850,000 automobiles per month passed through the Holland Tunnel, connecting this city with New Jersey; in the period of depression the number of vehicles passing through the tunnel each month is announced as more than a million. However, it is estimated that automobile sales in 1932 are about one-fifth the sales of 1929.

In August stocks listed on the New York Stock Exchange had a theoretical gain in value of \$7,287,742,341. Stock values rose 77.7 per cent in two months.

During August, 5,198 merchandise buyers were registered at New York hotels, the largest number in three years.

From these and numerous additional available facts one may describe the economic phenomenon of the Summer of 1932

From Various Sources

to suit his own preconceptions. Our own idea is that America at present is only slightly dented, by no means broke.—Editor & Publisher The Fourth Estate, Sept. 10, 1932.

RICH ORE SHIPMENTS MADE FROM IDAHO

Two of the best shipments received at the Midvale plant of the United States Smelting Refining and Mining Company in several months were settled for this week, according to M. Wallace Woolley, ore buyer.

The shipments were made by the Comeback Mine near Pioneerville, Idaho and went 10.77 and 12.73 ounces gold and 258.0 and 365.0 ounces silver to the ton, respectively.

The returns were about double expectations of the owners, Joseph Garnick and Louis Painich.—Western Mineral Survey, Sept. 9, 1932.

OLD SPANISH BONANZAS IN COLORADO RECALLED BY GREWSOME DISCOVERY

Gold mining mystery of the old Spanish days was revealed with the discovery of a crumbling human skeleton, chained by the neck to the wall of a mysterious cavern high in the rugged inaccessibility of the Sangre de Cristo Range in southern Colorado. Peter Moser, who brought the news to Denver, made the discovery and put on men's tongues again the legends of the fabulous Caverna del Oro of the seventeenth century Spaniards. The finding of the mouldering skeleton, still in its prison chains, at the bottom of a pit 500 feet below the entrance level of the cave, bespoke the Spanish method of mining with Indian slaves.

For it was to the Sangre de Cristo Range, deriving its name from that sanguine color which cloaks it in the early morning light and which reminded the pious Spaniards of the blood of Christ, that the adventurous and imaginative men of Santa Fe were drawn in their constant search for gold.

There are recurring legends of the rich vein they worked, which have spurred prospectors in the latter years.

The cave which Moser and three companions explored more fully than ever recorded, lies high above timberline on

Horn's Peak, one of the most magnificent buttresses of the spectacular and awesome range.

There is no accurate historical record known of the Caverna del Oro of the Spaniards, although legends and reports of the existence of a source of riches in the mountains are recurrent and numerous.

The legend of the mine and its riches is one of the most alluring ones of southern Colorado. There are stories of a party of Spaniards leaving the mine and being wiped out by Indians along the way and of discovery of a pile of gold nuggets along the trail not far from the mine.

The legend has inspired small boys—and men of the country, for that matter—on many a fruitless quest in search of the mine.—Denver Mining Record, Sept. 10, 1932.

PEW SAYS PEW

What is news? Well, here in a far western newspaper I find a two-column cut of a couple of dames, one in mid-Victorian costume, the other in a beautiful 1932 creation, the latter holding a cigarette in gloved fingers, thus scandalizing her sister of yesterday. The "news" which runs under this cut is as follows: "Of course, 40 years ago, when the leg o' mutton sleeve was all the rage, cigarettes would never have been mentioned in connection with styles. The belles of that era did not smoke since the raw tobacco used in making old-fashioned cigarettes did not have the mildness which the toasting process gives to the modern cigarette which Miss America of 1932 prefers." The item goes on to say, or rather infer, that the slender figure of the modern girl, contrasting with the more robust figure of the lady of the '90's, is due entirely to the smoking of toasted cigarettes.

Just what do you think readers think of a newspaper which puts that sort of stuff in news columns? I object to it on the ground that it is unpaid advertising, and also on the ground that it is false. I lived in the '90's. Some women not only smoked, but sniffed snuff. Some old women smoked pipes, thus toasting their own tobacco. Some smokers were fat and some slim, as in 1932.—Marlen Pew in Editor & Publisher The Fourth Estate, September 3, 1932.

Engineering Department

NEW SKIP AND CAGE INSTALLED IN NIAGARA NO. 2 SHAFT OF THE UNITED STATES SMELTING REFINING AND MINING COMPANY AT BINGHAM, UTAH

By H. G. HARMON, Engineer

A skip and cage, believed to be an innovation in mining practice in the intermountain section of the United States has recently been placed in service in the Niagara No. 2 shaft of the United States Smelting Refining and Mining Company's property at Bingham, Utah.

This skip and cage was built for service at Bingham with the idea in view of reducing dead load. The introduction of structural aluminum and aluminum sheets in the design thereof appears to have solved the problem.

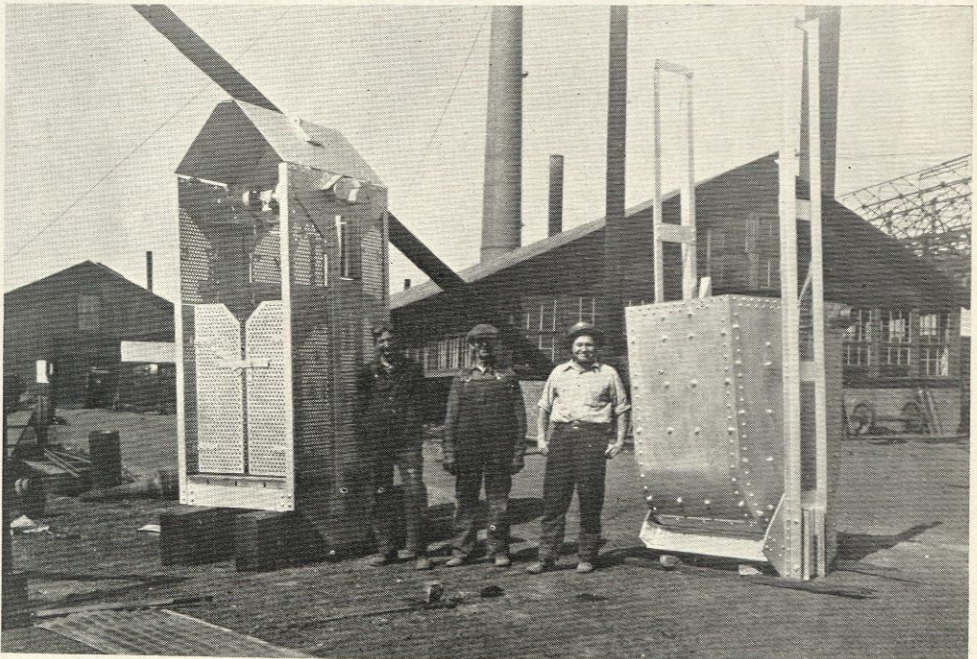
The skip, with the exception of the wearing parts, is made entirely of aluminum and lined with rubber $\frac{3}{4}$ -inch in thickness to take care of the abrasive action of the ore in loading and dumping. This skip, which is of the Kimberly type, has a capacity of 50 cubic feet, 25 per cent greater than the steel skips formerly in

service. It weights 1,590 pounds as compared with 2,155 pounds, the weight of the old skip.

The cage is a combination design of steel and aluminum and weighs 1,920 pounds as compared with 4,050 pounds, the weight of former cages in use, so that the total saving in dead load upon the hoisting equipment is 2,715 pounds, which will allow sinking to an additional depth of at least 1,200 feet without change in size of rope or the production of greater stress upon the hoist drum.

All suspending and wearing members in the cage are of steel while the enclosure, floor plates and bonnet sheets are of aluminum.

As a precaution against galvanic action, both in the skip and cage, all steel surfaces in contact with aluminum have been plated with cadmium and coated with a



Aluminum cage at left, aluminum skip right; recently built for Niagara No. 2 mine, United States Smelting Refining and Mining Company at Bingham. Left to right: Harry Bowen, welder; Leo Jensen, mechanic; William Dearing, foreman, Midvale Plant.

bakelite-base paint which seems to have been very effective, at least up to the present writing.

With the exception of the suspending members in the skip and cage, all riveting of joints between steel and aluminum parts has been accomplished by cold driving $\frac{1}{2}$ -inch diameter aluminum rivets. The suspending joints between the cage and the skip have been made by the use of turned steel bolts, cadmium plated.

The following data were used in the design of this work:

Weight of ore—160 pounds per cubic foot.
Maximum load allowed in skip—6,000 pounds.

Hoisting speed—800 feet per minute.

Acceleration—10 seconds.

Impact factor for skip—150 per cent.

Impact factor for cage—100 per cent.

Unit stress allowable—aluminum:

Tension—12,000 pounds per square inch.

Compression—12,000 pounds per square inch.

Shear—3,000 pounds per square inch.

Bearing—10,000 pounds per square inch.

Unit stress allowable—steel:

Tension—16,000 pounds per square inch.

Compression—16,000 pounds per square inch.

Shear—10,000 pounds per square inch.

Bearing—20,000 pounds per square inch.

Several improvements in the operation of this equipment were made, the principal one of which was the re-design of the skip dump track so that rope shock at this point has been practically eliminated and the roller impact upon the skip horns and dump track greatly minimized. This, of course, tends to longer wear and less maintenance cost.

Another marked improvement is the ability to renew the guide shoes without removing either the skip or cage from the shaft. This saves time and expense. These guide shoes are faced with $\frac{1}{16}$ -inch of stellite and when worn down may be readily removed for resurfacing, while a new set is easily slipped in place in a very short time.

All possible safety features have been taken care of in the construction of this equipment and it is being operated under very close supervision so that as time goes on it will be possible to obtain very accurate data from observation as to the desirability of further use of this material in similar lines of construction.

The work was fabricated in the Midvale shops under the direction of Mr. L. W. Kirk, master mechanic. Mr. Wm. Dearing was in charge of the structural work and Mr. M. J. Farmer of the mechanical work. Mr. Walter R. Hansen of the Engineering department and the writer were responsible for the design and construction. The skips were installed by Mr. L. A. Walker and Mr. J. B. Thurmond.

Accompanying this article is an illustration showing a skip and cage in the Midvale yard before shipment to the mine. Three units similar to this were constructed, one of which is held as a spare.

On account of hoisting in balance, the saving in power made by this installation is not considerable; however, it has numerous advantages—less load on the rope and hoisting equipment, ease of handling and the possibility of going to greater depth without increasing rope size or power of hoist.

FRESH GASOLINE

Fresh gasoline is being advertised by some producers and this slogan isn't mere advertising bunk. Engineers say that gas which has stood for a long time loses its volatility. In plain language, it hasn't the quick starting quality, nor response that fresh gasoline has. Speaking of gasoline, it isn't only safer but more economical to travel at a reasonable speed than a high speed. At fifty-five miles an hour the average auto consumes one-fourth more gasoline than at thirty miles an hour, while oil consumption is seven times as great at the former speed than at the one last named. Your tires also suffer for you are burning up about twice as much rubber at fifty-five miles as you are at thirty. Safety first—save gasoline, oil, tires and prevent accidents by driving at a reasonable speed.

ETYMOLOGY, ONE HUNDRED PER CENT

The word taxicab is an abbreviation of taximeter-cabriolet. Modern Gauls noted that certain types of carriages jumped and bounded like goats; the French, with their descriptive language powers, called these vehicles cabriolets. Goats, the generic name of which is Capra, making daring leaps, take chances and occasionally turn somersaults. Imitating goats is literally cutting capers. Remain with the genus Homo, don't switch to the genus Capra.

Utah Railway Company Notes

THOMAS SCHOTT, Correspondent

Provo, Utah

Mr. G. W. Quinn, industrial salesman for the Standard Oil Company with headquarters in Salt Lake City, was a visitor at the Provo Joint Shops September 19.

Messrs. L. W. Althof, division engineer, and G. Wilson, supervisor of bridges and buildings, of the L. A. & S. L. R. R. with headquarters in Salt Lake City, were business visitors at the Provo Joint Shops September 16.

Mr. S. F. Snodgrass, district inspector for the Interstate Commerce Commission, Bureau of Locomotive Inspection, made an inspection of locomotives at the Provo Joint Shop and Engine House September 1.

Mr. J. B. Somo, assistant superintendent for our company with headquarters in Provo, accompanied by Mr. W. H. Pickett, car foreman at Provo, made a business trip by automobile to Martin September 8.

Mr. C. A. Rolling, service engineer for the Garlock Packing Company with headquarters in Salt Lake City, made a business call at the Provo Joint Shops August 31.

Mr. C. E. Beveridge, engineer Maintenance of Way and Structures for our company, with headquarters at Martin, was a business visitor at the Provo Joint Shops September 16.

Mr. J. W. Burnett, assistant general superintendent for the Union Pacific System with headquarters in Pocatello, accompanied by Mr. W. J. Kirsch, master mechanic for the Salt Lake Division of the L. A. & S. L. R. R. with headquarters in Salt Lake City, made an inspection of the Provo Joint Shops and Yards September 8.

Mr. J. E. Taylor, stock man for the L. A. & S. L. R. R., employed in the Provo Joint Store, resumed duty August 28 after enjoying a two weeks' vacation. Accompanied by Mr. Frank Nichols and wife of Salt Lake City, Mr. Taylor made an auto trip to Bryce and Grand Canyons and Zion National Park.

Mr. V. D. Patton, representative for the Dearborn Chemical Company of Chicago with headquarters in Los Angeles, was a business visitor at the Provo Joint Shops September 5 and again from September 15 to 17. On the latter date Mr. Patton

rode engine 4, recently turned out of shop and moving to assignment at Martin, for the purpose of noting the results of the boiler compound furnished by his company.

Messrs. E. C. Webster and C. P. Kahler, committee on power plant operation and economics for the Union Pacific System with headquarters in Omaha, made a survey and check of the Provo Joint Shop power plant on September 15. They were accompanied by Mr. J. T. Wardenburg, trainmaster for the L. A. & S. L. R. R. and Mr. W. J. Kirsch, master mechanic, with headquarters in Salt Lake City, Mr. S. A. McCurdy, our company auditor, and Engineer H. G. Harmon.

Messrs. R. J. Vaughan, superintendent, J. B. Somo, assistant superintendent and C. E. Beveridge, engineer Maintenance of Way and Structure, all of our company, accompanied by our vice president and general manager, Mr. G. S. Anderson, made an inspection of the Provo Joint Shops from September 8 to 25, following which a trip was made by auto to Martin.

Mr. J. E. Johnson, formerly agent for our company at Martin, is working the first trick as telegrapher at the Provo Joint Station, previously handled by Joint Agent H. B. Mensel.

Mr. H. F. Tucker has been reemployed as car clerk at the Provo Joint Station due to an improvement in business.

Mr. Walter Vaughan, telegrapher, second trick, at the Provo Joint Station, accompanied by Mrs. Vaughan, made a trip by rail via D. & R. G. W.-W. P.-S. P. and U. P. to San Francisco and Portland during the last week in August.

Mr. J. T. Strong, district manager for the Continental Oil Company with headquarters in Salt Lake City, and Mr. L. R. Kump, local representative for the same company, were business visitors at the Provo Joint Shops September 17.

The seasonal program of repairing our locomotives is nearing an end and at this time we have remaining in the shop, engine 106 for class 3 general repairs; engine 201, class 5; engine 1 awaiting shops at Provo; engines 101 and 105 remain to be placed in shop for class 5 repairs. To date one locomotive has been turned out

after receiving class 2 thorough repairs; two class 3 general; three class 5 light and 2 "running repairs," unclassified.

As a result of slightly improved business conditions during the past 30 days a number of our train and enginemen were recalled to resume service; these included firemen A. F. Edelman, John Maleckar, H. L. Nielsen, E. E. Pennington and J. H. Pearson, and brakemen W. J. Bartlett, C. D. Martin, F. P. Branting, L. G. Mertsheimer, W. H. Johnston, C. C. Ellis, W. H. Meneray and L. E. Waid.

VALUE OF WHITE LEAD RECOGNIZED

That good paint is an economic necessity is forcibly demonstrated by the fact that building and loan associations recommend the use of pure white lead paint. To quote "The Building Loan," publication of The Railroad Co-operative Building and Loan Association, "Paint of proved quality, pure white lead and linseed oil, alone is worth while to put on, because when poor paint is used the protection and investment are lost." This statement should carry weight because it comes from an impartial organization whose sole aim is to see that investments in homes are properly and securely protected.

Economically, the application of pure white lead paint has a number of advantages to the homeowner. The value of the property is maintained as near to the original value as possible, because wood is protected from rotting, cracking and warping, and metal from rusting. This means that the owner can get a higher resale price and also larger loans on his property. It has been estimated by bankers that they will loan approximately 20 per cent more on well painted property. Well preserved and well painted property is also more readily saleable.

All these items are aside from the greatest saving of all. If pure white lead is used the paint lasts for the longest possible time, distributing the cost over a longer period and making the cost per year lower. Likewise, because white lead paint does not crack or peel, scraping or burning off old paint is eliminated at repaint time and a good foundation is left for repainting so that one less new coat is required than if the old paint has been removed, leaving bare wood.—Lead, Sept., 1932.

FRONTIER STEEL RAILS ROLLED FIFTY YEARS AGO AT MINNEQUA WORKS IN CONSTANT USE AT BINGHAM

Frontier steel—

Brawny men, begrimed with smoke and soot, labored with almost superhuman strength hand-rolling rails from the scorching red-hot billets in the Colorado Coal & Iron Company rail mill here half a century ago.

Long hours those men worked rolling rails which were to play an important part in the development of the West.

Today—just 50 years later—many of those rails are still in use.

This fact was discovered when an order was received here for 200 pair of 30-pound rail splices. The splices were ordered for rails which were marked "Col. C-I Co. IIIIIIIII82."

The significance of the marking was that the rails had been rolled at the Minnequa Works by the mother company of the Colorado Fuel & Iron Company in September, 1882.

The splices for the rails were ordered by the United States Stores Company, Salt Lake City, for the Lark Mine, at Lark, Utah, now the property of the United States Smelting Refining and Mining Company. The mining community of Lark is near Bingham, on the Denver & Rio Grande Railroad.

The order was made by J. J. Fitzgerald, of the Salt Lake office of the C. F. & I. Company.

Although neither company nor mine records show the time of the purchase of the 30-pound rails, which are in regular service at the United States Smelting Company's mine, it is believed they were originally rolled for the Rio Grande railroad.

It is supposed the Lark mine purchased the rails from the Denver & Rio Grande when that railroad changed from 30-pound rails to heavier stock.

When the rails were rolled at the Minnequa Works the D. & R. G. railroad was making rapid progress linking the mountains to the plains.

Track laying was started by General William J. Palmer in July 1871—in October the tracks had reached Colorado Springs where there was only one finished house.—The C. F. & I. Blast, Pueblo, Colorado, September 23, 1932.

Whoe're Excells in What We Prize

"Soc" Hadn't Heard About Turtle Oil

Socrates: "What do you think of mud as a beautifier?"

Professor Peavy: "Well, it hasn't done much for the turtle?"

Put the Men Back to Work

Consider the busy little bee,
As down the dusty road she beats it,
Gathering honey all the day,
While some lazy loafer eats it.

Were They in the Right Bank?

An elderly German couple decided to buy the farm adjoining their property. The price agreed upon was \$16,000 and they went to town to conclude the deal.

They entered the bank carrying an old battered milk pail with a tin cover, which they set on the floor between their chairs.

When the time came to pay, the old farmer pulled the pail up on his lap and started to count out an assortment of money, much of which had been out of circulation for some time.

Finally he reached the bottom, and stopped, obviously very upset.

"Why, there's only \$14,000 here," he exclaimed.

His wife looked equally concerned for a moment; then her face brightened.

"Ach, papa, you brought the wrong pail!" she exclaimed.

But Going Strong

Conductor. "Here, this half-fare ticket is no good."

Sandy: "Be yersel', mon; I'm in my second childhood."

Won by a Quarter

"Were you lucky at the races yesterday?"

"I'll say I was. I found a quarter on the way out of the grounds, so I didn't have to walk home."

"Staggering" Through

"Now, James," said the teacher, "if your father can do a piece of work in one hour and your mother can do it in one hour, how long would it take them to do it together?"

"Three hours," answered James, "counting the time they would waste in arguing."

It Won't Be Long Now

With another presidential election in the offing, now is the time that factions speak louder than words.

Signs of Prosperity

The rows of figures that are to be found ornamenting the highways of California are not statues as we first suspected. They are merely specimens of the genus Homo known as hitch hikers. They may be readily identified by the size and elevation of the thumb.

Communism

An Irishman in Russia, being examined by a Soviet for citizenship:

"If you had a million dollars, would you give half to the state?"

Mike: "Sure."

"If you had 1,000 acres of land, would you give half to the state?"

Mike: "Yes."

"If you had two pigs, would you give one to the state?"

Mike: "No."

"Why not?"

Mike: "Well, I've got two pigs."

And Puncture Proof

Teacher: "Can you tell me what a waffle is, Junior?"

Junior: "Yes'm, it's a pancake with a non-skid tread."

Dumbbell Slogan

Few ambitions, few disappointments.



BOOK AGENTS.—Young men out of employment can make from Five Hundred to Three Thousand Dollars a year by selling our valuable and popular publications. Each Agent will have a district exclusively to himself. With a Capital of Ten Dollars a fortune can be secured.

History Repeats Itself

Appears a Hero in Our Eyes—Swift

Moratorium

Customer. "The sausages you sent to me were meat at one end and breadcrumbs at the other."

Butcher: "Quite so, madam. In these hard times it is very difficult to make both ends meat."

Odd Marriages

Walter W. Wines and Amelia Beers at New York, and Edward T. Giggle and Sadie Laffshaker at Philadelphia.

Nightwatchmen All Wear 'Em

"I can't do a thing with Jones," said the manager. "I've had him in three departments, and he dozes all day long."

"Put him at the pajama counter," suggested the proprietor, "and fasten a card on him with these words:

"Our pajamas are of such superior quality that even the man who sells them cannot keep awake."

Over the Top

Miss Jones was teaching English to her class of 4B students. She asked that they write sentences containing the following words: Deduct, Defeat, Detail and Defense.

Little Johnnie turned in the following: "Defeat of deduct went over defence before detail."

Suppressed Desire

Then there was the American tourist in Europe who sent a picture postcard back to his son. It bore the following inscription: "This is the cliff from which the Spartan fathers used to throw their defective children. Wish you were here."

Advantage of Good Restaurants

"That's a good looking hat, Frank."
"Yeah, I bought it five years ago—had it cleaned three times—changed it twice in restaurants—and it still looks as good as new."

Then She'll Know Everything

Little Emily had been to school for the first time.

"Well, darling, and what did you learn?" asked her mother on Emily's return.

"Nothing," sighed Emily hopelessly. "I've got to go back tomorrow."

Succor in Distress

The Scotchman couldn't find his ticket. On the conductor's second round it was still missing. "What's that in your mouth?" the conductor asked.

Sure enough, there was the missing ticket. The conductor punched it and went his way.

"Ah, weel," said Sandy, when several of the passengers laughed. "I'm nae so absent-minded. It was a very auld ticket and I was just suckin' off the date."

Bum Raisin'

"Where were you born?"

"In Texas."

"Were you raised there?"

"They tried it once, but the rope broke and they had to let me go."

Da-Da-De-Da

"Do you know where you are?" demanded the tourist's wife.

"No," he admitted,

"I'm as lost as the average American is when he starts on the third verse of the national anthem."

Bewildering Bayer Buyers

By the way if you want to experience all the joy of a golf game without leaving home, just throw an aspirin tablet out on the front lawn, and spend the rest of the afternoon hunting for it.

"Quoth the Raven, Nevermore"

Eurgoyne: "Your face, seems familiar. I've either seen you before or someone very much like you."

Bocco: "Well, I've never seen you before—or else it's someone else very much like you I've never seen before."



BOARD.—A few families can be accommodated with: Board in a desirable location. Number limited. References exchanged.—N.B. A separate Table for Children.

Depression of '57—Harpers

Mineralitis

By JOS. D. O'BRIEN, Beatty, Nevada

This effusion is sympathetically dedicated to the suff'r'in' fraternity who have endured the agonies and pains, the sorrows and tribulations, that can be inflicted by a woman who corrals the mineral "bug."

I've hiked o'er the West now for forty
odd years
A-scouting for high-grade that seldom ap-
pears,
But I never knew hell, though I've suf-
fered hard knocks,
Till my wife began packin' home samples
of rocks.

Since she started prospectin' I'm kept on
the jump
To find room in the house in the midst of
her dump.
I'd gladly "bump off" were I nearer the
docks,
For I'm damn close to "bugs" in this
shack full o' rocks.

She has rocks on the table and rocks on
the chairs,
They're stacked up in the pantry and piled
on the stairs,
She has rocks in the bureau and some
cached in socks,
It's a damn crazy layout of all kinds of
rocks.

She gets rocks in the bean pot and rocks
in the stew,
And from rocks in the bed my old back's
black and blue.
My teeth are all busted, I'm suff'r'in' from
shocks,
Since my wife's been mixin' up grub with
the rocks.

The bookcase is filled and the sewin' ma-
chine, too,
With all kinds o' junk, green and white,
red and blue,
You find them in vases, in bottles, and
crock's,
And she's even tin-canning her damn mess
o' rocks.

She puts rocks in my clothing and rocks
in my shoes,
Were it not for old Volstead I'd take to
the booze,
So I'm thinking of arson, then sly as a
fox,
Hit the trail for the hills to avoid the
damn rocks.

She has rocks in her pockets and rocks in
her brain,
She talks rocks in her sleep, it's her con-
stant refrain,
You can see that she's bugs by the looks
of her frocks,
For they're busted to hell, just from
packin' home rocks.

I get rocks for my breakfast and rocks
for my lunch,
And for supper she hands me out another
new bunch,
If she sticks to her bug, I'll be sent to the
stocks,
For I'm almost plumb nuts on account of
her rocks.

She sees gold in the quartzite and gold in
the lime,
She finds gold in black lava as large as
a dime.
She shows plat'nium and diamonds in
chunks and in blocks,
But I ne'er found a speck in her damn
mess o' rocks.

She finds "indications" in all kinds o'
stuff,
She shows chlorides and carbonates even
in tuff.
She's got Loughlin and Spurr in a helluva
box,
And can give them all pointers about her
damn rocks.

She has crystals and pseudomorphs,
fossils and shell,
Concretions and bombs that were blown
out o' hell,
She has all kinds o' granite in chunks
and in blocks.
I sleep out with the dog on account of
her rocks.

She's got fossilized fishes, and mammoths,
and toads,
Eruptives and mudstones are mixed up in
loads,
There's no room in the shack for our
watches or clocks.
It's only a dump for my wife's mess of
rocks.

Since she's hog-tied the bug about structure and ore,

She has quickly acquired geological lore
That would subject both Dana and Emmons to shocks,

It's some new-fangled science about her damn rocks.

—Reprinted from the Bulletin of the Mineralogical Society of Southern California.

MASTODON REMAINS FOUND IN PLACE NEAR CHATANIKA

Early one morning Dr. Bunnell received an urgent call from A. D. "Buck" Roberts, a recent graduate of the College in Mining Engineering and at present night foreman in the Hydraulic department at Chatanika, to send out the "bone men" at once as they had uncovered the skeletal remains of a large animal.

Professor Henriksen and W. W. Walton, the "bone men," left at once and spent the rest of the day excavating what proved to be the remains of a Pleistocene Mastodon. The "bone men" wish to take this opportunity to thank all of the men at Chatanika for their splendid cooperation in helping to secure all of the bones and teeth of this animal, which without a doubt is one of the best "finds" made in this section of Alaska.

The Mastodon was found at a depth of fifty feet from the surface of the muck and about forty feet above the gravel. From the position of the fore legs and feet which were in an upright position he must have become mired in a quagmire and perished.

A brief summary of the differences between the mammoth and the mastodon will no doubt be of interest to those who have been following our work and to the men on the creeks who have been cooperating in the gathering of Pleistocene remains found in this district.

The mastodon was not such a large animal. We can compare him with the existing Indian Elephants which rarely reach a height of over nine feet six inches at the shoulders. The mammoth that roamed the north reached a height of fifteen feet at the shoulders. The mastodon, like the mammoth, had two tusks in the upper jaw and differed in that he had two tusks in the lower jaw. These lower tusks were quite short, ranging from eighteen inches to about twenty-eight inches. The

mastodon had teeth of the brachyodont group, which are a primitive short-crowned tooth, with simple roots and simple cusps quite similar to the teeth of a deer; while the mammoth has a hypsodont type of tooth, which is long rooted and flat on top for grinding purposes like those of the ox or horse. Both of these animals were herbivorous. There is one other difference which makes it easy to differentiate between them in that the mastodon has a very receding forehead while the mammoth's head is very high in front. This is however no criterion as to their respective brains. The mammoth's high forehead was developed to carry the large tusks with which he was endowed. It is a very light structure quite similar to a sponge.

Prehistoric Wolf Skulls

Returning from down the Tanana the Biological Survey party brings from Gus Benson of Hot Springs for the Museum, two extra fine prehistoric wolf skulls. The skulls were found on Sullivan Creek at a depth of 45 feet and beneath the frozen strata. They are estimated to be from 30,000 to 50,000 years old. The bone structure is nearly black and the teeth, most of which are present, are like polished fossilized ivory.—Farthest - North Collegian, Sept. 1, 1932.

FAIRBANKS COUPLE MARRIED

Miss Marie Blanchette was married Saturday evening at 7:30 o'clock to Benjamin S. McFarland.

Mrs. McFarland came to Fairbanks a little over a year ago and since then has been attached to the staff of St. Joseph's hospital as a nurse. Her home before coming north was in Anoka, Minnesota, but she was trained to become a nurse at Providence hospital, Seattle.

The bridegroom, who is the son of Mr. and Mrs. W. H. S. McFarland, came to Fairbanks in 1926. He was graduated from the local high school and then went to St. Louis and entered the Parks Air College. After a course at that institution he gained a transport airplane pilot's license. Mr. McFarland is now employed by the Fairbanks Exploration Co.—Fairbanks News Miner, Sept. 6, 1932.



Fire Destroys Highland Boy District in Bingham

U. S. COMPANY EMPLOYEES MAKE GENEROUS DONATIONS

By LEONARD McKINLEY, Correspondent

In one of the most spectacular and disastrous fires in the history of Bingham, a large part of the Highland Boy District was wiped out on the afternoon of September 8. The fire started in the old abandoned Princess theater about 3 p. m. and was not under control until more than three hours later. During this time about one-third of a mile on both sides of the street was completely burned, destroying in the neighborhood of 100 houses and rendering some 300 people homeless. Damage and property loss were estimated at between \$300,000 and \$400,000.

The buildings were constructed almost entirely of wood and were so dry that once the fire had started it was practically im-

however, that very few belongings were saved and many families were left with only the clothing they were wearing at the time the fire broke out.

The greatest financial losses were sustained by the Highland Boy school, Mrs. Alma Jones and the Utah Delaware Mining Company. The United States Smelting



Before the fire at Bingham.

possible to stop it. At the start it was evident that the fire-fighting equipment of Highland Boy and Bingham would not be adequate and the Murray and Salt Lake county equipments were called. Through the combined efforts of the four departments the fire was finally brought under control. It had gained headway so quickly,



During the fire at Bingham.

Refining and Mining Company suffered no loss since its properties are located in another part of the canyon.

Immediately after the fire had been brought under control, action was taken to bring relief to the stricken area. Every available place was turned into temporary sleeping quarters. Relief headquarters were established at the Highland Boy Community House. Food was brought from the lower Bingham stores and women from the various local societies volun-

teered their services to prepare it for consumption. Mr. C. E. Adderley, Dr. P. S. Richards and Mr. Baer were placed in charge of the relief work, which has been handled in a very efficient manner.

Governor George H. Dern issued a statewide appeal for funds, clothing and household furnishings. Plans were also announced for the raising of \$20,000 for relief and rehabilitation.



After the fire at Bingham.

At the United States mines a special welfare meeting was called and funds were given to the three men, John Pezel, Joe Berklon and Jose Lopez, employees of the United States mines, who lost their homes in the fire. These men lived outside the United States mines residential district. In addition, about \$775 was subscribed by the men in the United States mines, the money to go to the local relief committee.

It is only by labor that thought can be made healthy, and only by thought that labor can be made happy; and the two cannot be separated with impunity.—Ruskin.

SOVIET FOREIGN TRADE FOR FIVE MONTHS

Exports of the Soviet Union in the first five months of 1932 totaled 235,775,000 rubles (\$121,000,000), as compared with 309,413,000 rubles in the same period of last year, showing a decline of 23.6 per cent. Imports were also reduced, going from 441,612,000 rubles in the first five months of 1931 to 335,793,000 in the corresponding period this year, the decline in this case also amounting to about 24 per cent. There was an unfavorable balance of trade of 100,018,000 rubles as compared with 132,199,000 last year.

A noteworthy feature of foreign trade operations was the drastic decline in imports from the United States which fell from 131,504,000 rubles (\$67,700,000) in the first five months of 1931 to only 16,678,000 rubles this year, a drop of 87 per cent. On the other hand, imports from Germany and Great Britain showed a large gain during the period. Shipments to the U.S.S.R. from Germany totaled 148,667,000 rubles (\$76,600,000), and were more than 10 per cent above those of the preceding year. Great Britain was second in rank as a source of Soviet imports, its total of 47,627,000 rubles being about 84 per cent greater than in the preceding year. Germany supplied about 44 per cent of the total Soviet imports during the five months. The United States furnished only 5 per cent, as against 30 per cent in the first five months of 1931.

Great Britain was the best market for Soviet products, taking 54,867,000 rubles, 23 per cent of the total Soviet exports, as compared with 75,723,000 rubles in 1931. Exports to Germany showed a decline of about a third and amounted to 44,195,000 rubles. Shipments to the United States during the five months fell off about 35 per cent and amounted to only 5,562,000 rubles. This country took only 2.36 per cent of all Soviet shipments as compared with 2.75 per cent last year.—Economic Review of the Soviet Union, September 15, 1932.

Courage, so far as it is a sign of race, is peculiarly the mark of a gentleman or a lady; but it becomes vulgar if rude or insensitive, while timidity is not vulgar, if it be a characteristic of race or fineness of make. A fawn is not vulgar in being timid, nor a crocodile "gentle" because courageous.—Ruskin.

The Mental Gymnasium

UNITED STATES SMELTING REFINING AND MINING COMPANY

By R. E. KIMBERLIN, Utah Railway Company

ACCOUNTING PROBLEM

Two railroads, designated as "A" and "B" respectively, enter into an agreement wherein it is stipulated that the expense of operating a certain station shall be apportioned on a car mileage percentage basis. Later road "A" enters into an agreement with another road, designated as "C," whereby the expense of operating the station mentioned above is to be divided on a trains in and out percentage basis; the agreement with "B" remaining in effect. Assuming the following conditions, apportion the expense equitably among the three roads: Total expense—\$500.00.

	"A"	"B"	"C"
Car Mileage Basis.....	75%	25%	
Trains In and Out Basis..		70%	30%

PRACTICAL PROBLEMS

What weight can a 150-pound man lift with a 12 foot lever if the fulcrum is ten feet from the end of the power arm and two feet from the end of the weight arm?

What weight attached to a rope, winding around a 9 inch axle can be raised by a boy weighing 65 pounds, who is pulling on the rope which passes over a wheel 72 inches in diameter; the wheel being rigidly attached to the axle?

A starts from London to York and at the same time, B starts from York to London. Both travel at a uniform rate of speed. A reaches his destination in 25 hours and B in 36 hours after they meet. How many hours did it take each to make the entire journey?

Assumed that there are two candles, one of which will burn four hours and the other five hours. How long must they burn before one of the candles is three times as long as the other one?

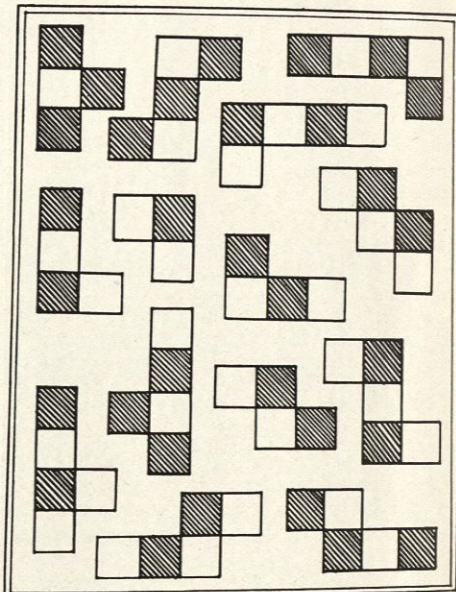
SHORT RULES FOR FARMERS

Dry meadow hay runs from 400 to 550 cubic feet to the ton. The density of hay depends upon its coarseness or fineness and the length of time it has stood in the barn or stack. If moist, fine and stored for a long time, it may run 550 cubic feet to the ton.

A standard cord of wood is four feet high and eight feet long, 128 cubic feet. Four foot lengths are frequently cut into three 16-inch lengths which make three

cords for the city purchaser, since a tier eight feet long and four feet high is considered a "cord" of stove wood.

WHO CAN PUT THESE TOGETHER TO FORM A CHECKER-BOARD?



Lay off fourteen figures similar to those above on stiff white paper. Cut these squares out neatly. If properly arranged they will fit together and form a checkerboard of sixty-four squares. But don't be discouraged if the pieces don't fit together properly the first time you try.

COMPARISONS OF TEMPERATURES

To convert degrees of Centigrade into Fahrenheit, multiply by 9, divide by 5 and add 32. To convert degrees of Fahrenheit into Centigrade, subtract 32, multiply by 5 and divide by 9. To convert degrees of Reaumur into those of Centigrade, multiply by 5 and divide by 4.

SHINGLING ROOFS

To find how many shingles you need for your roof, multiply the length of the ridgepole by twice the length of the rafter and the product of these two numbers by eight if you want the shingles to be exposed four and a half inches to the weather, and by seven and one-half if you want them to be exposed five inches.

Automobile Accident Alibis and Excuses

In the United States, two cars collide. If the participants are not killed or knocked senseless they emerge from the wreckage and immediately engage in an oral encounter which sometimes terminates in a fistic battle.

Englishmen are deliberate individuals and an automobile accident does not stir them as it does Americans. Reports of accidents are required and made in the British possessions.

Miss A. G. Buggy of the New York City office furnished us with a copy of "Finance and Commerce," published in Shanghai, China. The chief engineer of one of the leading British insurance companies supplied "Finance and Commerce" with some of the alleged amusing causes of accidents given him by claimants.

"A wasp entered my saloon car and in defending myself from the insect I ran into a ditch."

"He came along at a furious speed, hit a barrow and a cycle and then my car and ended up in the Reform Club."

"Tuesday is my wife's washing day and when I came home in the evening I broke my windshield and two front teeth."

"She suddenly saw me, lost her head and we met."

"I ran into a shop window and sustained injuries to my wife."

"My passenger behaved splendidly. She neither clutched me nor made a sound and so prevented a worse accident."

"My back wheel came off and followed me. When I stopped it collided with my car."

"I misjudged a lady crossing the street and collided with a stationary tramcar coming in the opposite direction."

"I was scraping my near side on the bank when the accident happened."

"The road was so narrow that only one car could travel east and west at the same time."

"I heard a horn blow and was struck in the back. A lady driver was evidently trying to pass me."

"Coming home that night I drove into the wrong house and collided with a tree I haven't got."

"The only witness was the man who hit me and his story does not agree with mine."

"I left my Austin seven outside and to my amazement when I went out later there was an Austin twelve."

"Lorry stopped and I stopped; lorry started and I started; lorry stopped and I bumped."

"I necessarily ran into the car in front of me as the car in front of me ran into the car in front of him."

"I encountered a thick patch of what I took to be fog but I discovered that it was steam from a steam wagon with which I had collided. The steam wagon then vanished into the fog."

"The machine was too badly damaged to proceed, so I left it in a yard and spent the night in a cell which the police kindly placed at my disposal."

"I swerved to avoid a motorcycle and hit it and to avoid further damage ran into a lamp-post and hit a wall."

"The other man was going too fast. He moved forward at least two feet after stopping."

"The lady drove straight ahead. I am unaware whether it was her desire to turn to the right or to the left, or to stop, as her arm was held horizontally at right angles to her car."

"Three women were standing talking to each other. When one stepped back the other two stepped forward. I found that I had to have an accident."

SPRAY METAL LIKE PAINT ONTO VARIOUS MATERIALS

Metals may now be sprayed almost like paint onto other metals, terra cotta, porcelain, glass and even wood and paper.

The process consists of feeding the metals in wire form through a combined spray gun and blow torch into a flame and atomizing the molten metals. The molten particles, though brought to an intense heat and blown onto the base material, are so tiny that they cool almost immediately upon striking the surface being coated.

The coatings are primarily for protective purposes, but they are equally useful in the decorative field. Bronze, brass, nickel, silver, aluminum, monel metal and other alloys are the spraying metals used.

—Denver Mining Record, Sept. 3, 1932.



An Analysis of Accidents in a Middle-West Coal Mine Covering a Two-Year Period

No. of Cases	CAUSE—	Man-Hours Lost	Settlement Expense
1	Employee not instructed at all.....	16	\$ 33.42
5	Instructions not enforced	152	370.82
2	Instructions incomplete	192	60.61
7	Employee not skillful	208	247.19
3	Employee ignorant	409	211.82
6	Employee used poor judgment	234	344.72
10	Disobedience of rules	692	1,590.95
12	Interference by others	1,399½	1,124.07
1	Attention distracted	162	214.70
11	Inattention	2,004	2,134.42
7	Taking chances	1,056	695.71
1	Short cuts	128	38.42
3	Haste	114	116.95
3	Employee sluggish or fatigued mentally.....	272	72.45
1	Employee excited or angry.....	128	26.02
4	Employee physically defective	341	103.29
1	Employee fatigued physically	34	23.56
1	Danger points inadequately guarded.....	1,408	765.90
1	Untidy or otherwise dangerous passages or work spaces	120	109.28
1	Clearances insufficient for safe work.....	24	12.84
1	Improper tools used	16	45.12
6	Method of doing work improperly planned.....	616	810.00
1	Unsafe layout of plant.....	176	32.98
6	Proper personal safety equipment not available.....	256	234.06
TOTAL		10,157½	\$9,189.53

Tonnage, man-hours of exposure and some other data are not included in the above analysis. Detail is sufficient, however, to arrive at certain conclusions.

The greatest number of cases, 12, centers around "interference by others," but the man-hours lost in these 12 cases were exceeded by a single case, "danger points inadequately guarded," indicating lack of safety appliances. "Inattention" was responsible for the greatest number of man-hours lost, while its half-brother "taking chances" accounted for a little more than half as many as "inattention."

The first three causes, "employee not instructed at all," "instructions not enforced," "instructions incomplete," could be eliminated by better supervision by foremen. Employees who are not "skillful," who are "ignorant," necessarily use "poor judgment" since that is the only kind of judgment they have. Employees who "take chances," make "short cuts," use "haste," become "excited" or "angry" are personally to blame for accidents.

"Disobedience of rules" is a matter of discipline—responsibility here rests entirely upon foremen, the superintendent or the management.

An "employee sluggish" remedy is most difficult since sluggishness is a matter of heredity or temperament. It would be necessary to reach back several generations to eliminate this factor. An employee "physically defective" belongs to one of two classes—physically defective when employed or made so in the service of an industrial plant. Physical examinations are designed to eliminate proper specimens in industrial service. If a concern, with its eyes open, hires a man physically defective, it is plainly up to them to recompense him if he is further disabled. Likewise, if an employee has become physically defective while in the service of a company, through its negligence, it is up to the organization to take care of him.

Conditions under which employees live and their habits should be subjects of inquiry if employees are "fatigued mentally" or "fatigued physically," provided they are not overworked.

The items, "untidy or otherwise dangerous passages or work spaces," "clearances insufficient for safe work," "improper tools used," "method of doing work improperly planned," "unsafe layout of plant" and "proper personal safety equipment not available" are obviously up to the general management.

It appears that this analysis is a proper subject of study by operators, supervisors and employees. It has the ear-marks of an honest report and responsibility seems to be about equally divided.

World Speed Records Shattered on Salt Beds

JENKINS SETS NEW HIGH MARK IN 24-HOUR GRIND

One morning early in September of this year, Ab Jenkins climbed into his 12-cylinder stock model Pierce Arrow car in Buffalo, New York, and drove through to Marshalltown, Iowa, the same day. After a comfortable night's sleep he drove to Rawlins, Wyoming, the next day, secured lodgings for the night and arrived in Salt Lake City the next morning at 10:30. The car had been used before it started on the trip and when Jenkins reached Salt Lake City the speedometer showed 36,000 miles.

On Sunday, September 18, at 8 a. m., Mr. Jenkins, a native of Salt Lake City, climbed into the same car and drove it continuously for twenty-four hours, with the exception of five stops for gasoline, without relief. A good sized crowd gazed with amazement as the flying car passed the tape approximately every five minutes as it made each ten-mile lap. When Jenkins climbed wearily from the car after the final lap, he had chalked up another world record with a speed of 112.935 miles per hour for 2,710 miles.

Throttle Wide Open

The throttle of the car was wide open from start to finish, with no slackening of speed or relief for either car or driver. Mr. Jenkins was provided with sand-

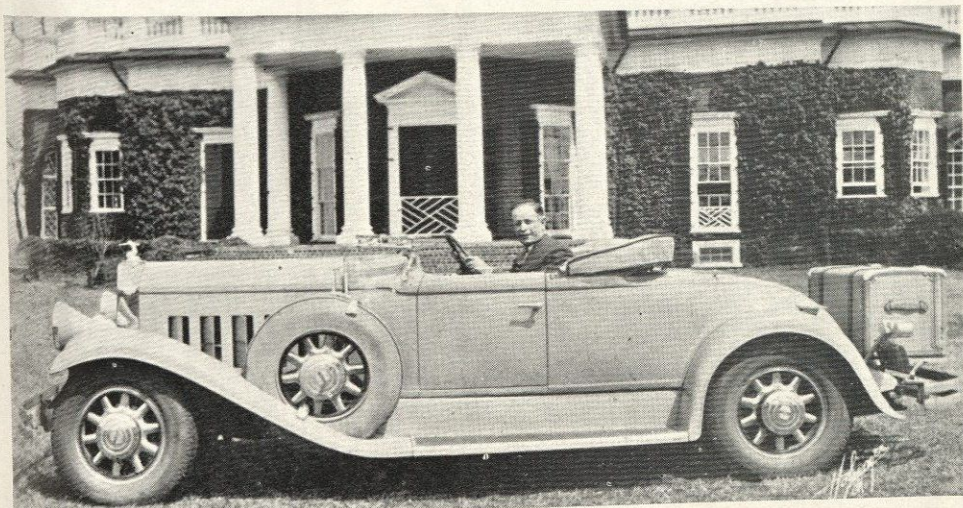
wiches but did not eat any; he drank tomato juice and orange juice and chewed six packages of Wrigley's gum, however. This is the second time he has driven a car continuously for twenty-four hours without getting out of the seat, having performed the same stunt in 1928.

The tank capacity of his Pierce Arrow is 30 gallons. A supplementary tank, with divisions, holding 70 gallons more was installed. The divisions were to prevent side slap which would be considerable when several hundred pounds of gasoline were bounding from one side of the car to the other.

A flock of mechanics and a truck with a dozen spare Firestone tires were on the grounds but no tire changes were made during the twenty-four hours. Pennzoil was used. While oil was added, there was no oil change. No additional water was used during the record run.

Early Morning Adventure

Red lights, hung on wooden sticks, were used to mark the course for Mr. Jenkins. After these were lighted most of them were extinguished as the Pierce Arrow rushed past them. The red lanterns were then placed on the salt beds where they were not extinguished so frequently. It



Ab Jenkins in his 12-cylinder Pierce Arrow car in which he broke world records on the salt beds. The car is shown on the lawn in front of Monticello, historic home of Thomas Jefferson.

was necessary, however, to keep several men on the job circling the track to re-light these signals which were the only markers Jenkins had to keep him on his course. About 3 o'clock in the morning the light on the Pierce Arrow went out and Jenkins was left in total darkness except for the markers and the moonlight. He never slackened his speed, however, and drove fiercely through the darkness until the coming of daylight at 6 o'clock in the morning.

On September 24 the Saturday Evening Post carried a two-page advertisement in which it was stated, and probably truthfully, that a certain well known driver had broken three world's records. The advertisement was in the interests of an excellent and well known motor oil. This man chalked up what was said to be a world's mark—making 800 miles at an average of 112.5 miles per hour. According to timing officials, Mr. Jenkins' average speed was 112.935 miles per hour, which covers the 800 miles mentioned in the advertisement. Jenkins then continued for 1,910 miles farther, doing an average of .435 miles per hour more for the entire 2,710 miles than the driver mentioned in the September 24 Saturday Evening Post did for only 800 miles.

Weird Sights

In 1846 the Donner party attempted to cross these salt beds in wagons. Their

speed was very limited compared with that of Jenkins, for it required about a week for them to make the same mileage he made in less than three-quarters of an hour. In addition, they left a number of their wagons and several yokes of oxen on the desert, whereas his event passed off without accident of any kind.

The salt beds are a weird place and it is no wonder the Donner party became terrified. At midday one can see trains traveling along in the air, cities right side up and upside down and people walking everywhere. Nothing is where it belongs. To spectators three miles away, Jenkins appeared to be driving from ten to fifty feet off the salt beds, dropping onto the earth when he approached them and gradually climbing up into the air as he moved away. During the night Mr. W. D. Rishel, manager of the Utah State Automobile Association, observed that a truck which was supposed to be standing still was cutting circles and jumping up and down in the air. He immediately called others' attention to the phenomenon and an investigation was made by Mr. J. G. King, assistant secretary of the Chamber of Commerce. Mr. King walked over to the truck which was presumably standing still. Spectators then noted that Mr. King was traveling in circles and jumping up and down. He returned and reported that the truck was absolutely stationary though



"Pioneer Palace Car" of James F. Reed, member Donner party, driving onto salt beds west of Salt Lake City. This was presumed to be the most splendidly equipped emigrant wagon that ever traversed the western trails. Part of the remains of this wagon may be seen on the salt beds about ten miles north of the race course where Jenkins broke world records.

several doubted the truth of his statement.

Salt Beds Favorable Race Course

Mr. Jenkins says there is no other place in the world where a run like this can be made. He states that ocean beaches are favorable places when conditions are right but if storms leave the beaches rough the races must wait until the ocean waters smooth them out. The only limitation on the salt beds as a race course is that the moisture in the salt varies according to rains and other climatic conditions. The damp salt, however, has a cooling effect on rubber and does not radiate heat to the engine.

Stock Car Used

Mr. Jenkins stated that he was at some disadvantage in comparison with racing car drivers in that they are comfortably and securely seated. In the Pierce Arrow stock car he was comfortably seated but was compelled to "hang on," so to speak, at high speed.

Stock Car Records by Jenkins

Mr. Jenkins holds upward of fifty major stock car records. Some of these are as follow:

1926—From New York to San Francisco in 86 hours and 20 minutes—Transcontinental record.

1927—From New York to San Francisco in 77 hours and 40 minutes—Transcontinental record.

Five hundred mile record for fully equipped stock cars at Atlantic City Speedway—average 79.6 miles per hour.

1928—Set new record for one man driving one car in one day by averaging 84.15 miles per hour for 24 hours.

One of the drivers to set a new 24-hour record, driving from dusk to dusk at 85.2 miles per hour.

Drove to the top of the famous Uniontown hill, Uniontown, Pa., passing the crest at 60 miles per hour. Carried two passengers in the ascent.

1930—Established new record up Mt. Washington, N. Y., covering the 8-mile course in 14 minutes.

Breasted precipitous Mt. Mansfield at Barre, Vt., in 7 minutes 34 4-5 seconds, a climb of 4.6 miles.

Raced to the top of Mt. Mitchell, highest peak east of the Rockies, in 45 minutes.

1931—Established 39 major stock car performance records under official supervision of the American Automobile Association.

Pursued by Police

Jenkins recounts with amusement the story of being mistaken for the murderer



An eerie place on the salt beds to the north of the speedway. In the foreground, remains of an emigrant wagon found on the salt desert in 1929. From the extraordinary size of the wheels and their location on the trail, this was probably the remains of James F. Reed's "Pioneer Palace Car" of 1846. In this vicinity and other places where wagons were stalled, "yoked" bones of oxen, chains and remnants of wagons in place may be seen.—Photo by Charles Kelly.

of a Salt Lake policeman in 1923. Jenkins had a car exactly like that of the policeman and at just the time of the murder, he and a companion decided to make a flying trip to Los Angeles. The car, traveling at a high rate of speed, aroused suspicion and warnings were sent out all along the line. Jenkins and his companion reached Los Angeles, however, totally unaware that they were "wanted." They made the run in 16 hours and 17 minutes; Jenkins later lowered this time to 12 hours and 20 minutes.

A Million Miles Without Accident

Mr. Jenkins states that he has driven over a million miles without a major accident of any kind. While he carries insurance, he has never been called upon to pay a cent to any other person, neither has anyone contributed a cent to him on account of an accident.

Blowing Up Tires

Blow-outs at high speed are rightfully looked upon by most people with terror. Jenkins, like other good drivers, does not court blow-outs but before he arrived in Salt Lake City he performed an unusual stunt. A standard Studebaker car was equipped with a certain brand of tires in which were embedded powder charges and fulminating (dynamite) caps. Wires were extended from the caps in such a way that they would come into contact with another wire connected to the dash with a switch. When high speed was attained Jenkins could explode the caps and powder and blow up the tires. He did this with eight tires while making 80 to 85 miles per hour. The object of this demonstration was to prove that it could be done without losing control of the car.

A Utah Booster

Mr. Jenkins is a Utah booster and carries Utah license No. 10,000 on his car whenever he makes a record.

SHOULD BE IN EVERY HOME

A sponge rubber pillow that sings and talks to an ear placed upon it is the latest product of a radio company. It is intended for use in hospitals. A radio unit within the pillow is connected to a central radio receiver. So quiet is this type of installation that only the patient with his head on the pillow can hear the radio program.

SURVEY REVEALS NEW LOW PRICES OF FARM GOODS

The recently published report of Utah farm prices issued by the experiment station of the Utah State Agricultural College under the direction of W. Preston Thomas, gives an idea of the general falling off in returns received by the farmer for his crops. The report in part is given herewith:

"In spite of recent price advances at terminal markets for some agricultural products, the average prices paid producers in Utah for farm products dropped 5 per cent from July 15 to August 15. Farm prices in this state reached a new low point during August, when the all-commodity index reached 67 as compared to 72 the previous month, and 100 for the pre-war period.

"The exchange value of farm products for goods which farmers buy is now only 61 per cent of the 1910-14 average. The commodities which have increased in price since May of this year are hogs, beef cattle, lambs, eggs and butter. The principal decline took place in prices received for wheat, hay, potatoes, apples and feed grains. The increase in price for a number of commodities was due to seasonal variation. For instance butter, eggs and hogs usually increase in price during August and September of each year.

"The index of United States farm prices advanced from 57 to 59 from July to August. The increase in cotton prices, together with the increase in prices of livestock for areas near markets were responsible for the slight improvement in farm prices in the United States as a whole.

"The general wholesale price level for all commodities has increased from the low point in June of 93 per cent of pre-war average, to 94.6 for August. These changes are almost entirely due to increase in wholesale prices of agricultural products. During the past year, however, wholesale prices have declined about 8 per cent while retail prices have dropped about 15 per cent.

"Although wholesale and retail prices have declined during the past year, there has been a greater drop in farm prices which has further reduced the purchasing power of agricultural products."



Measure Of Men And Mileage

By Eugene H. Pressey

Sing, if you will, of the desert's thrill
And the spell of the springing sage:
Chant, if you must, of the stock trails' dust—
They're written on many a page.

But I'll take mine on a salty line
Where a steamer's smoke hangs curled
In tendrils dim, on the outer rim
Of Neptune's briny world.

Tell your tale of the men who fail
To stand the mountain's gaff:
Of the weak ones whipped, and the lads who slipped
On the trail, and you make me laugh.

I'll show you a life that is naught but strife;
Where a marlin-spike's a comb:
Where, if you don't stick through your long night trick,
The sea will chase you home.

I love the taste of the salty waste:
Give me the lift and fall
Of a laden ship on her maiden trip.
Give me the nerve and gall

That must fill a man if he'd ever span
The measureless miles of sea:
Give me the pull of the tide at full,
And you've given life to me!



"Sutter's Gold"

On February 15, 1803, a child was born at Kandern in the Grand-Duchy of Baden and christened Johann August Sutter. Had he stuck to paper making, the trade of his ancestors, his name would probably have been unknown; through his love for adventure it is famous throughout the world.

The story of his emigration to America, his overland trip across the continent, his negotiations with the Russians and his acquisition of a small empire in the Sacramento valley, obtained from the Republic of Mexico, is well known throughout the world. He succeeded as a rancher and trader; his decline came with the discovery of gold at Coloma. His properties were swept away. Then began a series of appeals to California and the nation to compensate him for his losses. In 1878 Sutter settled definitely in Washington to press his claim against the Government.

No word picture has ever surpassed that of Blaise Cendrars who, in his "Sutter's Gold," portrays Sutter's last days in Washington:

One warm afternoon in June the general is sitting on the bottom step of the great flight that leads to the Capitol. Like many aged men, his head is quite empty of thought. He is simply enjoying a rare moment of physical well being as he warms his old carcass in the sun.

"I am the general, general, general.

"I am the gen-e-ral!"

A ragged street urchin of seven is running down the great steps, taking four at a stride. It is Dick Price, the little match-seller, the old man's favorite.

"General! General!" he cries, flinging his arm around the drowsy old man's neck, "you've won! Congress has just settled it. A hundred million dollars—all for you, General!"

"You're sure . . . ? Sure . . . ?" cries Sutter, holding the wriggling boy tightly.

"Sure, General! It's in all the papers. Jim and Bob has gone to get them. I'm going to sell papers to-night! You watch 'em go!"

Sutter does not see seven little rascals behind his back who are wriggling with laughter like so many malicious sprites under the lofty portico, and gesticulating delightedly at their confederate. He jumps to his feet, draws himself to his full height, says but one word:

"Thanks."

Then he thrashes the air with his arms and falls like a log.

General Johann August Sutter is dead.

It is three o'clock in the afternoon—the 17th of June, 1880.

It is Sunday, and Congress is not even in session.

The terrified urchins take to their heels.

The hours pass upon the vast deserted square and as the sun sinks the giant shadow of the Capitol covers the body of the general as with a pall.

Johann August Sutter was seventy-seven years old when he died.

Congress has never pronounced in his case.

His descendants have refrained from all intervention. They have abandoned the affair.

The succession is still open.

We are in 1926. For a few years to come those who have the right can intervene, act, file their claim.

Gold! Gold!

Who wants Gold?

